



## **Determinants of entrepreneurial intentions among undergraduate students in Botswana: The role of institutional quality.**

By

Strike Mbulawa<sup>1</sup> and Rudo Nyamudzanga<sup>2</sup>

### **Abstract**

This study employs a linear model to delineate the main determinants of entrepreneurial intention and assess its perceived impact on employment creation among undergraduate students. It examines the role of institutional quality in enhancing entrepreneurial intention. Using data collected from a survey, the study confirms that entrepreneurial intention explains employment creation. The most robust determinants of entrepreneurial intention are institutional quality, access to finance, family factors, gender, risk taking orientation and formal & life-long education. Findings are consistent with the theory of planned behavior. They can assist in understanding the expected behavior of students and the likelihood of them creating employment in the future. The implication of the theory is in understanding factors within and outside the control of students. Thus, creating an enabling environment that reinforces such entrepreneurial attitude among students enhances the chances of doing so.

**Key words:** Botswana, Entrepreneurial Intention, Employment Creation, Institutional quality

JEL: M20 M13 L26 J23

### **1. Introduction and Background**

This study delineates the factors that explain entrepreneurial intentions among undergraduate students in an emerging economy. In this context, the study examines the role of quality of institutions in explaining entrepreneurial intentions. Entrepreneurship is a process whereby people discover, evaluate and exploit opportunities to create future goods and services (Shane & Venkataraman 2000). It is a major source of innovation, enterprise productivity, and employment. It plays a vital role in economic growth, raising living standards and improving competitiveness. It is also important in poverty alleviation and enhancing wealth creation (Ugwu & Ezeani, 2012).

---

<sup>1</sup>Faculty of Business and Accountancy, Department of Accounting and Finance, Botho University, Gaborone, Botswana. Email: [smint50000@gmail.com](mailto:smint50000@gmail.com), Cell: +26774052456 (Corresponding Author)

<sup>2</sup>Faculty of Business and Accountancy, Department of Accounting and Finance, Botho University, Gaborone, Botswana. Email: [rudo.nyamudzanga@bothouniversity.ac.bw](mailto:rudo.nyamudzanga@bothouniversity.ac.bw), Cell: +26773365077



In many countries, the lack of or the existence of poorly developed entrepreneurial capacity is one of the main factors contributing to poor socio-economic performance. Africa has the lowest rate of entrepreneurial development which may explain the highest rates of poverty and unemployment when compared to other continents (Naude,2010, Munemo, 2012).In response to this many African countries have developed and implemented policies and programs with the aim of widening entrepreneurial capacity. Entrepreneurship contributes to social wealth by creating new markets, new industries, new technology, new institutional forms and jobs. The jobs created in turn lead to equitable distribution of income which culminates into higher living standards for the populace (Kenosi, 2006,Muranda et al, 2011). Thus, entrepreneurship is one of the most important factors in job creation as many graduates' face unemployment challenges emerging markets.

Evidence (Chambers and Munemo, 2017) shows the importance of institutional quality on entrepreneurship. Strong institutions promote entrepreneurship orientation among the youths (Tur-Porcar, Roig-Tierno and LlorcaMestre, 2018). Alvarez,Amoros and Urbano (2014) argue that the effect of legal and regulatory environment on entrepreneurship differs from one country to another. Country level governance affects the business environment and entrepreneurship activity. The quality of economic conditions and entrepreneurial activity are prerequisites for a good economic environment. A favorable environment creates beneficial conditions for all participants which stimulate entrepreneurial activities (Olvecka, 2013, Grosanu et al, 2015). Entrepreneurial activity adapts to the politically determined institutional framework. Unfavorable institutional factors hinder entrepreneurial orientation (Douhan and Henrekson, 2007). Troilo (2011) argues that the rule of law is important for growth in entrepreneurship and that common law legal systems have negative effect.

Botswana gained her independence from Britain in 1966 being one of the poorest African economies. Over the years the country has transformed from a poor to an upper middle income status. This has been explained by significant mineral wealth, good governance and prudent economic management. The stable political environment prevailed over the years and economic growth has been gradual and on the positive side. The country relies heavily on diamond revenue and this may be adversely affected by a slowdown in global economic activity. Living conditions have improved and inequality has fallen over the years. There is a potential threat from the rising youth unemployment which is currently around 20.1%. Effective support of entrepreneurial activity and reforming the business environment offers potential solutions to the problem of unemployment (World Bank, 2020). The country has made notable strides to support



entrepreneurship, as many measures, policies and programs are in place to enhance entrepreneurship development. One of the important organizations that has been created to foster entrepreneurship is the Citizen Entrepreneurial Development Agency (CEDA). CEDA is the umbrella body whose involvement in entrepreneurship development transcends all sectors of the economy. Youth Development Fund (YDF) is another important vehicle created by the government of Botswana which aims at assisting the unemployed and under-employed youth in Botswana. These agencies provide advocacy roles and assist with a variety of issues relating to youth development in general including entrepreneurial skills (Kenosi, 2006).

Despite all these measures and government efforts to promote entrepreneurial activities, not much progress seems to have been achieved, judging by the performance of the informal and formal sectors. Despite this effort, past statistics indicate that three out of five businesses fail within the first few months of operation (Mbogo, 2011). This phenomenon has made it very difficult, if not impossible, for small businesses to grow into large scale enterprises. Furthermore, the rising level of unemployment comes with social costs if left unattended. Conceited efforts have been made by the government to support youths and vulnerable groups to set up their own businesses. The low uptake of such opportunities by youths is worrisome. In addition, studies on factors influencing entrepreneurial intentions among undergraduate students in the context of Botswana are still inconclusive. Studies done in different environments fail to deal with country specific issues like unemployment and poverty alleviation due to different institutional quality. In view of this, this study delineates such factors in the context of Botswana and within private tertiary institutions. The study focuses on factors that act as enablers and constraints of taking up entrepreneurial opportunities by undergraduate students. From a policy maker's point of view the following questions are still important: What are the main enablers and constraints to entrepreneurial intention among the youths? How does institutional quality influence entrepreneurial intention? What is the potential of entrepreneurial intention to reduce unemployment in Botswana?

This study confirms the role of entrepreneurial intention in enhancing employment creation. The most robust determinants of entrepreneurial intention are access to finance, family factors, gender, institutional quality, risk taking orientation, formal and life-long education. Institutional quality enhances the risk taking orientation, perceived access to finance and the potential uptake of an entrepreneurial activity by female students. Findings are consistent with the theory of planned behavior. They assist in understanding the expected behavior of students and the likelihood of them creating employment in the future.



The rest of study is organized as follows: section two provides a review of literature, section three explains the methodology employed, section four presents and discusses results and section five concludes the study and provides policy implications.

## **2. Literature review**

This section presents a review of literature related to entrepreneurial intentions among undergraduate students. It gives a general overview of entrepreneurship and the chapter also presents theories on entrepreneurship and a conceptual framework of the study.

### **2.1. Theoretical Review**

#### **Theory on Planned Behavior**

It is very important that factors influencing entrepreneurial intentions and behavior of undergraduate students be adequately understood to develop and implement effective strategies to stimulate them. The identification of a suitable theoretical framework and enough understanding of the determinants of entrepreneurial intentions and behaviour can help entrepreneurial educators, consultants, advisors and policy makers to foster entrepreneurship training which can be started at universities and within society. Entrepreneurship researchers have adopted intentional models of social cognition to identify the key cognitive determinants of entrepreneurial intention and behaviour (e.g., Kolvereid, 1996a; Krueger and Carsrud, 1993).

The Theory of Planned Behaviour as originally presented by Ajzen (1988, 1991) states that intention is the most important determinant of future behaviour. The theory shows that the intention to engage in a particular behavior precedes the actual engagement in the behavior. The intentions to engage in a business venture is affected by motivational factors. These include 1) the degree to which one holds a positive or a negative valuation of a behavior and its consequences 2) perceptions of what others think about that engagement and 3) perceived ease or difficulty of carrying out that behavior. One would engage in an activity like starting a business if these three factors are strong and/or positive. The three factors are affected by personal and situational factors.

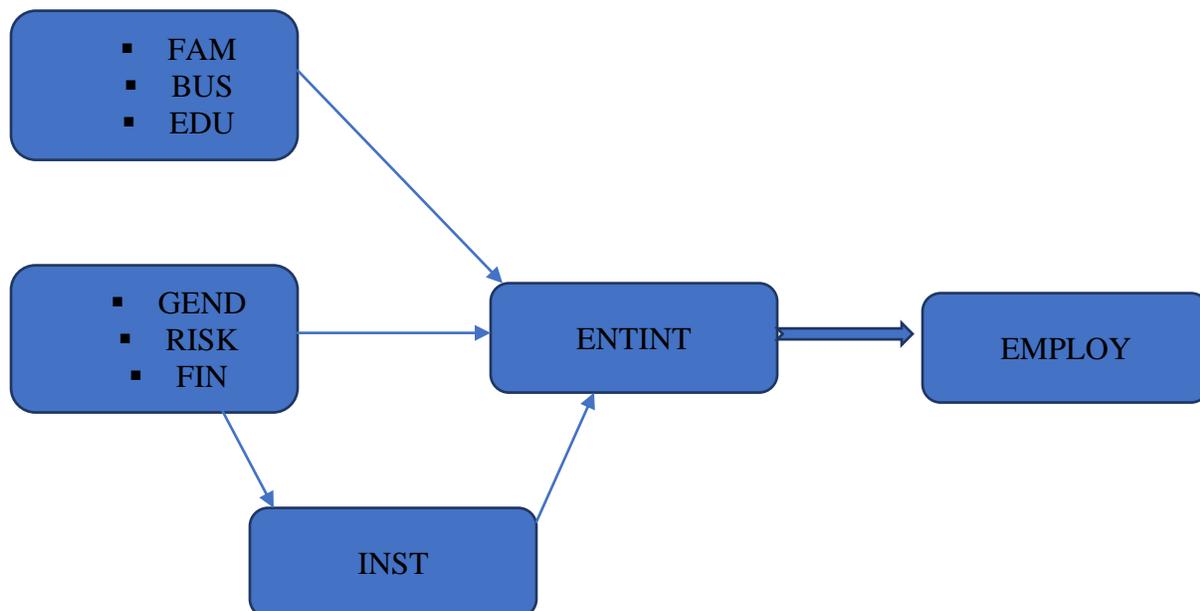
This theory (Ajzen, 1988) assumes that the best prediction of behaviour is given by asking people if they are intending to behave in a certain way. Intentions are therefore assumed to capture the motivational factors that influence behavior; they are indications of how hard people are willing to try, of how much effort they are planning to exert, in order to perform a behavior like starting a new business. As a general rule, the stronger the intention to engage in a behavior, the more likely should be its

performance (Ajzen, 1991, p. 181). Understanding the intentions towards any purposeful behavior is essential to our understanding of the antecedents and consequences of that behavior, as well as to what that behavior correlates with (Ajzen and Fishbein, 1980). We employ this theory to predict entrepreneurial intention and delineate factors that explain the possibility of starting of a business in future by students.

### Conceptual Framework

The conceptual framework is developed by analyzing factors that will influence or motivate undergraduate students to start their own business. The overall objective of this research is to find out the extent to which certain factors influence individual students on their intentions to start a business and subsequently create employment. The study therefore focuses on the following factors, as defined in Table 1: demographic (GEND, EDU), family (FAM), financial factors (FIN, RISK), Business Connections (BUS) and institutional quality (INST) as defined in Table 1. The conceptual framework is depicted in Figure 1. These five factors are hypothesized to improve entrepreneurial intentions which in turn result in an increase in employment. The institutional quality variables acts as both a determinant and an intervening variable.

Figure 1: Conceptual framework





## 2.2. Empirical Review

Entrepreneurial intention is defined as how willing or interested an individual in prototypical entrepreneurial activities (Zhao, 2005). The extent and level of entrepreneurial intention explains the length to which an individual is said to be engaged in starting a business or actively partnering an existing business and/or acquiring a business entity. According to Alexander and Honig (2016), it is safe to assume that entrepreneurial intention differs among ethnic groups due to the dissimilar effects of their personal attitude. Even though little is known about differences in entrepreneurial intentions and attitudes among persons belonging to different cultures and ethnic groups, research has shown that attitudes towards entrepreneurship may also vary by ethnicity (Lindsay, 2005). Accordingly, since entrepreneurial intention has proven to be a primarily one of the biggest predictors of entrepreneurial behavior, exploring the factors influencing and hindering students' entrepreneurial intentions should be given special consideration (Gelard & Saleh, 2011).

### 2.2.1. Entrepreneurial Intentions and Employment

Linan et al. (2013) define entrepreneurial intentions as a conscious awareness and conviction by an individual with the intent to set up a new business venture and plans to do so in the future. It refers to intentions to be self-employed or to start-up a business (Lakovleva and Kolvereid, 2009). Entrepreneurial intention is where individuals choose between unemployment, self-employment, and employment (Verheul et al. 2010). This is also supported by Ritsilä and Tervo (2002) who show that unemployed individuals are pushed into self-employment when faced with choosing between unemployment and self-employment. Entrepreneurial intention triggers an individual to decide to move from unemployment or salaried employment to self-employment. The decision to be self-employed is considered voluntary, conscious and intentionally planned (Krueger et al. 2000).

Entrepreneurship intention promotes diversified job creation, more competitiveness, and wealth for the entrepreneurs themselves (Criscuolo et al., 2014). This is supported by Cook (2010) who opines that new venture creation reduces unemployment. In addition, Wilson et al. (2009) claim that entrepreneurship is the engine fueling innovation, employment generation and economic growth. This is further supported by Acs and Armington (2004) who argue that entrepreneurship plays an important role in job creation. Again, Kelley et al (2012) argue that engaging in self-employment is the only means for livelihood and survival because of high unemployment rates.



### 2.2.2. Determinants of Entrepreneurial Intention

There are many factors that promote or hinder entrepreneurship. This study acknowledges other factors as well but it mainly focuses on demographic, family, financial and institutional factors and their effect on entrepreneurial intention.

#### Demographic Variables

**Demographic factors** influence entrepreneurial intentions, and these include among others individuals age, gender and level of education (Ezeani and Ugwu and 2013). These are discussed in turn as follows:

**Education-** education related factors that influence entrepreneurship include education level, skills and competencies, trainings attended, entrepreneurship orientation, and knowledge. Solesvik (2013) finds that the students who participate in entrepreneurial education have higher perceived entrepreneurial motivation than the students who did not study an entrepreneurial course. Lack of appropriate technical and life skills contribute to poor performance of enterprises. Oguntimehin and Olaniran (2017), show that entrepreneurship education is a significant contributor to entrepreneurial intention. This is supported by Zhang, Duysters and Cloudt (2014) who show that entrepreneurial education has a positive effect on entrepreneurship.

Van der Sluis et al. (2004) shows that the effect of general education, measured in years of schooling, on entrepreneur performance is positive (Van der Sluis et al., 2004; Murphy, 2006). According to Davidsson and Honig (2003), education can help a person discover new opportunities but it does not necessarily determine whether he or she will create a new business to exploit the opportunity. However, Quan (2012) confirms that advanced educational background has a positive impact on one's impulsive and deliberate entrepreneurship intention.

**Gender-** gender is one of the main factors that have been proposed to have an impact on entrepreneurial intention (Kristiansen and Indarti, 2004). Previous studies (Crant, 1996, Zhao et al, 2005, Phan et al., 2002) confirm that men are more likely than women to express an intention of starting a business. In contrast, some studies showed no meaningful difference between men and women in terms of intentions to start businesses (Kourilsky and Walstad, 1998; Shay and Terjensen, 2005; Wilson et al., 2007; Smith et al., 2016, Chaudhary, 2017). These results challenge past research findings which rank female students lower on entrepreneurial dimensions compared to male students.



**Age** - age is a variable that affects entrepreneurial intention. This is alluded to by some researchers who believe that people mostly decide to establish their own firms between the ages of 25 to 34 (Choo and Wong, 2006, Delmar and Davidsson, 2000). Although older people are more capable of exhibiting behaviors that deviate from the customary way of doing business as they have greater means and opportunity for doing so (Curran and Blackburn, 2001, Weber and Schaper, 2004), they are much less likely than younger people to take steps toward acting entrepreneurially (Hart et al., 2004) or to actually establish a company (Kautonen, 2008).

### **Financial Factors**

Financial factors also influence entrepreneurship, and these include access to credit, interest rates, repayment period, loan approval process and collateral requirements. Lack of access to finance is almost universally indicated as a key problem for the entrepreneurs. Lack of access to long-term credit for small enterprises forces them to rely on high cost short term finance. There are various financial challenges that face small enterprises. They include the high cost of credit, high bank charges and fees (Momanyi&Munene, 2013). Most young entrepreneurs often launch their businesses without carefully estimating the amount of capital needed to get started (Ezeani and Ugwu, 2013). On the other hand, Luc (2018) argues that there is no direct relationship between entrepreneurial intention and access to finance. The major challenge faced by potential and existing entrepreneurs is lack of information and limited access to finance (Smit and Watkins, 2012).

### **Family Factors**

Family background is another factor that influences entrepreneurial intention. Families with entrepreneurial occupation, provide youngsters with an opportunity to obtain certain business skills, confidence, experience, and vision, all of which contribute to the inclination to start a new business (Ozaralli and Rivenburgh, 2016, Israr, 2018). This is supported by several studies which state that family background is an essential contributor to entrepreneurial intention (Carr and Sequeira, 2007, Koellinger and Thurik, 2012, Anderson et.al, 2005; Rajjman, 2000). Crant (1996) also confirms that being raised in a family that is entrepreneurial, significantly impacts an individuals' intentions to start their own business. Other studies also confirm that the children of entrepreneurs learn the factors involved in running a business and consider establishing a new organization as a natural career choice option



(Cooper et al., 1994, McElwee and Al-Riyami, 2003, Fairlie and Robb, 2007). Chaudhary (2017) confirms that self-employed family background has a positive relationship with entrepreneurial intent.

Students can also be affected by role models. These are people within or outside a family that are perceived to have succeeded in a particular endeavor and one would want to emulate such people (Bosma et al, 2012, Gibson, 2003). The knowledge of such persons inspires students to work towards becoming like them (Bygrave, 2004). The success of one person would motivate the new entrepreneur during the early years of their career. Paying attention to role models allows one to learn new skills, perform new tasks and acquire new norms. Role models provide social capital to students (Bosma et al, 2012). The availability of role models within or outside families have a strong influence on the students' intention to start a business. It increases the desire for the student to turn the dream into a reality (Chlosta et al, 2012, BarNir et al, 2011).

### **Institutional Factors**

Institutional factors affect entrepreneurial intention, and these include the government and the regulatory environment. The regulatory environment refers to the formal rules as well as incentives, which constrain and regularize entrepreneurial behaviour (Seelos et al., 2011:335 Urban, 2013). The regulatory environment is an inhibitor or an enabler in the development of entrepreneurship (Herrington, Kew & Kew, 2009). Bosman, Wennekers and Amaros (2012) suggest that an improvement in the regulatory environment has positive effects on the growth as well as survival of businesses

There are several government factors that influence entrepreneurship, and these include communication and transportation facilities, business registration procedures security and business licensing requirements and procedures (Nochian & Schott, 2012). This is also supported Jia et al., (2014) who indicate that the business environment is among the key factors that affect entrepreneurship growth. Basically, all unpredictable government policies coupled with high taxation rates and corruption, continue to pose great threat to the sustainability of entrepreneurship. Countries that are interested in economic development are expected to pay attention to macro-level institutions as well as policies that encourage entrepreneurial behaviour (Valdez & Richardson, 2013).

This study has highlighted literature concerning some of the factors that influence entrepreneurship among undergraduate student and it also summarized the role of the Theory of Planned Behavior in explaining entrepreneurship intention. Literature has confirmed that factors affecting entrepreneurial



intention include but not limited to institutional quality, family, demographic, education and financial. Results are country specific and the effect of each variable is sensitive to methodologies employed, context and personal orientation.

### 3. Methodology

**Target Population and Sample:** The study is based on data collected from students doing the Entrepreneurship module at Botho University. This is a semester nine module for students who are in their final year of study. There is a total of four hundred and fifty nine (459) students, from all five (5) faculties, who are eligible. The study uses a sample of two hundred and thirteen (213) students or 46%. Sample selection is based on purposive sampling techniques. This is because researchers have prior knowledge (Maree, 2007) about the population which is doing a module which is assumed to influence their entrepreneurial intentions. A formula by Yamane (1967) is used to calculate a sample size as follows:

$$n = \frac{N}{1 + Ne^2}$$

Where:  $n$  = is the sample size,  $N$  is the target population and  $e^2$  is the squared margin of error which is set at 5% or 0.05

The study is a cross sectional and uses the correlational research design. This allows for the determination of relationships among variables using statistical analysis (correlation, multiple regression). This helps to examine relationship among variables as indicated by literature. Thus, the study is quantitative in nature.

The study relies on information provided by sampled respondents. The researchers have no control over individual responses but assume that participants would provide accurate information. The researchers rely on suitable research methodology which produces reliable estimates.

Data is obtained using a structured questionnaire. All statements are closed ended being a likert scale ranging from strongly agree to strongly disagree. A pilot study is done with students who are not part of the sample. This helps in improving the statements contained in the final instrument. The questionnaire is administered by the researchers and respondents are given 5 working days to complete. Consent is sought from the Botho University management and participants.



The data is captured and analysed using Statistical Package for Social Sciences (SPSS). Analysis is done using descriptive (mean, percentages, correlation) and inferential statistics (multiple regression analysis). Regression analysis has been employed in previous studies (Ramoni, 2016, Farouk et al, 2014, Uddin & Bose, 2012). Responses are transformed by calculating mean values that are used to represent the main variables. The study employs two dependent variables capturing number of people that each participant is expecting to employ after starting their own business (EMPLOY) and intention of a participant to start their own business enterprise (ENTINT).

The model has interaction terms to measure the marginal effect of institutional variables on access to finance, gender and risk taking orientation. Estimations are done as follows: firstly, we estimate a model with all variables without institutional quality variables and interaction terms; secondly, we include the institutional quality variable to analyse the contribution to the model and lastly, we estimate the model with all variables including interaction terms (equation 1). The interaction terms are constructed by taking the product of the two variables, after standardizing the values. Equation 2 is used to examine the effect of entrepreneurial intention on employment. The following equations are applied:

$$ENTINT = \beta_0 + \beta_1 RISK + \beta_2 GEND + \beta_3 FAM + \beta_4 FIN + \beta_5 EDU + \beta_6 BUS + \beta_7 INST + \beta_8 INST\_GEND + \beta_9 INST\_FIN + \beta_{10} INST\_RISK + \varepsilon \quad (1)$$

$$EMPLOY = \beta_0 + \beta_{11} ENTINT + \varepsilon \quad (2)$$

All variables are defined in Table 1 as guided by literature.



Table 1: Definition of variables

Variable	Definition
ENTINT	Entrepreneurial intention which is calculated as an index capturing the mean value for scores for all statements that are used to identify the intention to start a business
FIN	This index is an average for all statements measuring of funding opportunities. The variable captures access to funding
BUS	This index is an average for all statements that suggest that business connections are important for one to start and succeed in business
EDU	This index is an average for all statements capturing the learning that happens in formal academic setting plus learning that happens outside the academic setting before one could start a business. The latter is also referred to as life-long learning
FAM	This index captures all family and related factors that may influence the starting of a business
GEND	This index is an average of statements that captures gender related traits of starting and succeeding in business
INST	This is an index capturing all items measuring the quality of institutions (political variables, legal and regulatory framework, government support and effectiveness).
RISK	This index is an average of all statement that capture the risk taking orientation of each participant
EMPLOY	This captures the number of employees that each student expects to engage upon starting a business venture

#### 4. Results and Discussion

The study uses a complete data set from 133 participants giving a response rate of at least 62%. There is marginal difference based on gender, males (51.1%) and females (48.9%). A total of 26.3% indicate that their family income is less than P5000.00 per month, 22.6% show that the family income is between P5001.00 and P10000.00. Those who indicate earnings of at least P30000.00 per month are 7.5%. Students from the faculty of Business and Accounting constitute a total of 42.9%, followed by Faculty Education and Health which constitutes 29.3% of the sample. A high number of participants indicate their intention to set up a business in the services sector (48.1%), farming (18.8%) and retail (17.3%). Those with a close friend operating a business constitute 27.1% of the sample while the remainder did not have a close friend doing so. A total of 68.4% of the population indicate that they have a family member operating a business, 69.2% show that they have an intention to start their own business and almost all students attended a government school (Table 2).



Table 2: Demographic Variables

Item	Category	Frequency	%
Gender	Male	68	51.1
	Female	65	48.9
Monthly family Income	upto 5000	35	26.3
	5001 to 10000	30	22.6
	10001 to 15000	20	15.0
	15001 to 20000	23	17.3
	20001 to 30000	15	11.3
	30001 and above	10	7.5
Programme of study	Accounting	39	29.3
	Finance	5	3.8
	Business management	6	4.5
	Health management	39	29.3
	Computing	22	16.5
	Sports management	7	5.3
	Jewelry	4	3.0
	Multimedia	4	3.0
	Hospitality	7	5.3
Sector	Retail	23	17.3
	Wholesale	6	4.5
	Farming	25	18.8
	Services	64	48.1
	Education	5	3.8
	Other	10	7.5
Friend	Yes	36	27.1
	No	97	72.9
Family member	No	42	31.6
	Yes	91	68.4
Entrepreneurship intention	No	41	30.8
	Yes	92	69.2
School type	No	4	3.0
	Yes	129	97.0

Table 3 shows that participants intend to employ about 12 people on average, there is high level of entrepreneurial intention (mean=4.19), education matters in the choice to start a business (mean=3.72), family support has a middle level effect on entrepreneurial intention (mean=3.03) institutional quality has large effect (mean=3.71), gender differences and risk taking behavior and access to finance have a low effect on entrepreneurial intention. This can be improved by the quality of institutions.



Table 3: Descriptive Statistics

	N	Mean	Std. Deviation	Skewness		Kurtosis	
				Statistic	Std. Error	Statistic	Std. Error
INST	133	3.7143	0.61066	-0.311	0.21	0.59	0.417
EDU	133	3.7229	0.63906	-0.509	0.21	-0.214	0.417
FAM	133	3.0301	0.86404	0.016	0.21	0.014	0.417
BUS	133	3.2143	0.90722	-0.296	0.21	0.019	0.417
GEND	133	2.218	0.93478	0.447	0.21	-0.318	0.417
FIN	133	2.9023	0.87139	-0.131	0.21	0.399	0.417
RISK	133	2.7068	1.2234	0.152	0.21	-0.888	0.417
ENTINT	133	4.1944	0.72531	-1.062	0.21	0.675	0.417
EMPLOY	133	11.68	10.885	2.342	0.21	5.488	0.417

The study shows that there are both negative and positive correlations, which are significant, among variables. Entrepreneurial intention and employment creation variables have a significant positive correlation. This shows that entrepreneurial intention may have a positive effect on the number of people employed and vice versa (Table 4). However, this may not mean that either variable explains variations in the other. This is further interrogated using regression analysis.

Table 4: Correlations

	EMPLOY	ENTINTERN	INST	EDU	FAM	BUS	GEND	FIN	RISK
EMPLOY	1.000	.309***	.262***	0.113	-0.030	0.012	-0.065	0.059	-0.072
ENTINT	.309***	1.000	.317***	.479***	.281***	.216**	-.171**	-0.006	-0.042
INST	.262***	.317***	1.000	.454***	.239***	0.083	-0.028	.424***	0.017
EDU	0.113	.479***	.454***	1.000	.173**	.332***	-0.027	.182**	0.043
FAM	-0.030	.281***	.239***	.173**	1.000	0.169	-0.154	0.000	-0.097
BUS	0.012	.216**	0.083	.332***	0.169	1.000	0.077	0.049	0.081
GEND	-0.065	-.171**	-0.028	-0.027	-0.154	0.077	1.000	0.068	.859***
FIN	0.059	-0.006	.424***	.182**	0.000	0.049	0.068	1.000	.177**
RISK	-0.072	-0.042	0.017	0.043	-0.097	0.081	.859**	.177*	1.000

\*\*\*Significant at 1%; \*\*significant at 5% and \*significant 10%

The estimated coefficients, using equation (1), are presented in Table 5 to show main factors explaining entrepreneurial intention (ENTINT), the dependent variable. All the models are correctly specified with



significant values for the F-statistics. The values of  $R^2$  gradually improve, from 36.2% to 45.2%, as more variables are being included in the model. All the variables applied in the analysis are robust in explaining entrepreneurial intention in the three models except access to finance (FIN) which is not significant in model 1. The variable capturing the contribution of business connections (BUS) is insignificant in all the three models. Three variables (RISK, GEND and FIN) improve in size and magnitude after including the institutional quality variable (model 2). Results clearly shows the contribution of institutional quality on entrepreneurial intention. This is consistent with results by Chambers and Munemo (2017) which show that new business creations are lower in countries with excessive barriers to entry and low quality government institutions. The three measures of institutional quality (political stability, regulatory quality and voice and accountability) promote entrepreneurship. Furthermore, the same variables improve in size after introducing interaction terms (model 3). Results are consistent with past studies (Olvecka, 2013, Grosanu et al, 2015) which alludes to the importance of a favorable environment in stimulating entrepreneurial. Poor quality of institutions do not promote entrepreneurial orientation (Douhan and Henrekson, 2007).

Findings show that access to finance (FIN) has a negative effect on entrepreneurial intention. This shows that potential entrepreneurs still consider access to finance as a challenge. This may indicate that there is still limited access to finance due to stringent requirements and informational inefficiencies in the market. Graduates scored this item negatively due to the perception that financial resources are not readily available for them to exploit which limits their entrepreneurial orientation (Smit and Watkins, 2012). Perceived limited access to finance acts as a constraint to entrepreneurial intention. More so, lack of information on the available financial products limits entrepreneurial orientation (Khan and Anuar, 2018). However, previous studies (Choo and Wong, 2006, Schoof, 2006) suggest that improved access to funding should enhance entrepreneurial intention. Perceived ease of access to finance has a positive effect on entrepreneurial commitment (Shree and Urban, 2012). Furthermore, Ayyagari et al (2008) shows that improved perceived access to finance is the most efficient way to improve entrepreneurial intention. The difference with our findings emanates from differences in institutions. Our study shows that an improvement in institutional quality would enhance entrepreneurial intention as access to finance increase. Thus, improvement in quality of institutions would improve perceptions on access to finance by students. They bring hope for improved entrepreneurship even though perceived access to finance is seen as adverse.



The study shows that both formal (entrepreneurial) and informal (life-long) education matter in explaining entrepreneurial intention. The study confirms a positive impact and that formal education provides a firm foundation while life-long learning provides the skills and competences for one to consider starting up a business. This is consistent with results by previous studies (Jakopcet al, 2013, Isaacs et al, 2007, Cheung and Chan, 2011, Barba-Sanchez and Atienza-Sahuquillo, 2018) which show that entrepreneurship education improves entrepreneurial intentions among university students. Participants of such programmes have been found to be more likely to start their own business. Thus education has a place in fostering an entrepreneurial culture in Botswana. Education is meant to act as an intervention that increases the success of an entrepreneur in business. Those who have gone through education have been found to distinguish themselves from those who did not.

The study shows that family factors contribute positively to entrepreneurial intention among students. Evidence shows that family motivation, availability of financial resources and having a family role model positively impacts on entrepreneurial intention. This is consistent with past studies which show that family factors are regarded as informal institutions in nature and they have a positive effect on entrepreneurial intentions. For example, Carr and Sequeira (2007) show that intergenerational success has a positive influence while Fairlie and Robb (2005) children from family running a business are likely to start their own. Family businesses provides children with skills and knowledge that enhances chances of success in their own businesses (Altinay, 2008).

The study provides evidence that gender has a negative effect on entrepreneurial intention. This shows that males are more inclined to starting a new business than female students. This is consistent with previous propositions (Gupta et al, 2009, Ozaralli and Rivenburgh, 2016). On the other hand, better institutions would increase the uptake of new businesses by female students. This is shown by a positive effect of gender variable as institutional quality improves. There is hope for improved entrepreneurial intention among females as institutional quality improves.

The study shows that risk taking orientation of the student is important. Specifically, the study shows that a high risk appetite is associated with more entrepreneurial intention. Students with high levels of risk acceptance would have stronger edge to start a business. This is consistent with previous studies (Hmieleski and Baron, 2009, Gurol and Atsan, 2006, Popescu, Bostan, Robu & Maxim, 2016) which showed that students with high scores in risk taking have more entrepreneurial inclinations. The need for achievement and propensity towards risk taking contribute to entrepreneurial activity. Furthermore, o



positive and significant coefficient of the variable INST\_GEND shows that the level of risk orientation rises as institutional quality improves. It shows that an improvement in the rule of law, government effectiveness and a better political environment enhances risk taking behavior among students. Findings are consistent with previous studies (Opusunju et al, 2018 and Fereidouni et al, 2010) which show that the political, business and regulatory environment matter for entrepreneurship development. An economy with low corruption, few bottlenecks and high government support facilitates entrepreneurial uptake.

However, the study shows that having business connections does not matter for successful entrepreneurial activity. Business connections have a positive and insignificant effect on entrepreneurial intentions. This shows that having business connections is not seen as explaining likelihood to start a business. This suggests that there is shift in the mind set of potential entrepreneurs which would affect the manner in which they would conceive the idea of setting up a business venture. Our results are not consistent with Goethner et al (2012) who show that established relationships and networks positively affect entrepreneurial intention. This can be explained by differences in institutions.

Table 5: Estimated Coefficients

Model	1	2	3
(Constant)	2.420***	2.152***	2.211***
RISK	0.184**	0.205**	0.198**
GEND	-0.391***	-0.417***	-0.445***
FAM	0.144**	0.116*	0.11*
FIN	-0.084	-0.148**	-0.232***
EDU	0.472***	0.377***	0.321***
BUS	0.059	0.080	0.074
INST		0.224**	0.346***
INST_GEND			0.269***
INST_FIN			0.149***
INST_RISK			0.193*
R <sup>2</sup>	0.362	0.382	0.452
Adj. R <sup>2</sup>	0.332	0.348	0.407
F	11.923***	11.052***	10.063***
DW	1.973	1.982	2.027

\*\*\*Significant at 1%; \*\*significant at 5% and \*significant 10%



The positive correlation between entrepreneurial intention (ENTINT) and employment creation (EMPLOY) variables is further interrogated using multiple regression analysis. The aim is to establish the potential causal relationship among variables. This study (Table 6) shows that entrepreneurial intention has a positive effect on employment creation. The starting of new businesses allow for the further conversion of available resources and enhances the hiring of employees. This would result in further development of human capital. Findings concur with those by Sasu and Sasu (2015) who show that self-employment activity involves risk taking and using opportunities to create employment through innovative and creative approaches. Promotion of entrepreneurial orientation creates employment (Nicolaidis, 2011, Osemeke, 2012). Entrepreneurship is the best antidote to unemployment (Brownhilder, 2014) and it helps fight unemployment among the youths and create wealth (Khalifa and Dhiarf, 2016). However, ENTINT explains only 26.8% of changes in EMPLOY variables. This shows that there are other key variables which can explain employment levels.

Table 6: Estimated Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
	B	Std. Error	Beta			Zero-order	Partial	Part
(Constant)	-5.163	5.378		-.960	.339			
ENTINT	4.015	1.263	.268	3.178	0.002	.268	.268	.268

EMPLOY is a dependent variable,  $R^2 = 0.268$

### 5. Conclusion and Recommendations

This study employed a linear model to delineate the main determinants of entrepreneurial intention among students in Botswana. It also assessed the perceived effect of entrepreneurial intention on employment creation. Basically, the study established that entrepreneurial intention is useful in reducing the level of unemployment among graduates. The coefficient of the entrepreneurial intention variable is significant at 1% level and its correlation with employment creation is significant and positive.

The most robust determinants of entrepreneurial intention are access to finance, family factors, gender, risk taking orientation, formal and life-long education. Findings are consistent with the theory of planned behavior. They can assist in understanding the expected behavior of students and the likelihood



of them creating employment in the future. The implication of the theory is in understanding factors within the control of students and those outside their control. Thus, creating an enabling environment that reinforces such entrepreneurial attitude among students enhances the chances of doing so. This would reinforce the individual student's self-efficacy and controllability. Taking up of an entrepreneurial activity would be dependent on the students' perception about their abilities to do so and having high behavioral control.

The study showed the importance of both formal and life-long education in explaining entrepreneurship intention. This applies to students across the different programmes of study. Thus, entrepreneurial education may not be sufficient in enhancing intention to start a business. The study showed the significance of strengthening the link between formal education and life experiences to improve chances of starting a business. The significance of lifelong education in explaining entrepreneurial intentions suggests that speakers from industry may add value to the theoretical knowledge taught to students. They can share experiences with students which helps them to reposition and rethink their entry strategy into the world of business. This is supported by Hills (1988) who suggested that real life examples are critical in enhancing the effectiveness of entrepreneurial education. It is more plausible for female role models to be engaged as guest speakers to change the mind set of female students so that they can enter into the supposedly male dominated occupation. This is supported by previous studies (Lockwood, 2006, Beamen et al, 2012). Their orientation towards entrepreneurship is enhanced by an improvement in the quality of institutions.

Favorable family traits have a positive impact on improving students' inclination towards starting own business. Family role models will enhance chances of starting a business. It is however possible that students may be exposed to perceived role models, in negative way, which may adversely affect their career choices. Mentoring can be improved at family level to redirect the attitude of students towards starting their own business. It's imperative for families to provide financial support as startup capital. This reinforces the desire to start a business. This form of finance can be supplemented, largely, by that which comes from external sources. The different sources of finance and products availed by financial institutions and the government have a positive effect on the uptake of entrepreneurial opportunities among graduates. This implies that government should avail different forms of funding that are meant for new start-ups. This will complement financing products from financial institutions which may not be easily accessible due to lack of collateral. Understanding and reduction in the perceived barriers to



accessing finance is plausible for change in perceptions and increased uptake of entrepreneurial activity among students. The change in perception can be supported by improved institutional quality.

While this study confirms that males are more dominant in starting their own businesses, it also shows that they are ready to take risk more than their female counterparts. This is consistent past studies (Gupta et al, 2009, De Bruin et al, 2006) which showed that entrepreneurship is being regarded as male dominated field. Caliendo et al (2009) showed that students with high inclination towards risk have a significantly high probability of becoming entrepreneurs. The risk orientation is enhanced by strengthening the quality of institutions. In view of this, it is imperative to note that students would think of engaging in more entrepreneurial activities when the perceived opportunity cost of not doing so is high. Motivation of female students would help them to understand the level of exposure they face as they continue to expect to get employment. Information on labour market uncertainty may help improve the risk-taking ability of students. Targeted entrepreneurial education for women may increase their risk-taking behavior being supported by high quality institutions.

It is important for institutions of higher learning, in partnership with government, to arrange for symposiums which would promote networking among the youth. This would create new business relationships and strengthen existing ones which increase the chances of success in future business endeavors. Findings from this study may be strengthened by widening the scope and testing the applicability of other key factors. Students from different parts of the country and in different institutions may be incorporated into similar studies. This may bring insights that are different from students who are taught in one institution and showing the same character traits. Studies may employ different methodologies, for example the use of probability models that may indicate the chances of engaging in entrepreneurial activity. It is possible to employ non-linear models to enhance identifying optimal levels at which policy changes may be desirable.



## 6. References

- Acs, Z., &Armington, C. (2004). Employment growth and entrepreneurial activity in cities. *Regional studies*, 38(8), 911-927.
- Alexander, I. K., &Honig, B. (2016). Entrepreneurial intentions: A cultural perspective. *Africa Journal of Management*, 2(3), 235-257.
- Altinay, L. (2008). The relationship between an entrepreneur's culture and the entrepreneurial behaviour of the firm. *Journal of small business and enterprise development*, 15(1), 111-129.
- Alvarez, C., Amoros, J. E., &Urbano, D. (2014). Regulations and entrepreneurship: Evidence from developed and developing countries. *Innovar*, 24(SPE), pp. 81-89.
- Amos, A., & Alex, K. (2014). Theory of planned behaviour, contextual elements, demographic factors and entrepreneurial intentions of students in Kenya. *European journal of Business and Management*, 6(15), 167-175.
- Anderson, A. R., Jack, S. L., &Drakopoulou Dodd, S. (2005). The role of family members in entrepreneurial networks: Beyond the boundaries of the family firm. *Family Business Review*, 18(2), 135-154.
- Autio, E., Keeley, R. H., Klofsten, M., &Ulfstedt, T. (1997). Entrepreneurial intent among students: testing an intent model in Asia, Scandinavia and USA.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211.
- Ayyagari, M., Demirgüç-Kunt, A., &Maksimovic, V. (2008). How important are financing constraints? The role of finance in the business environment. *The World Bank Economic Review*, 22(3), 483-516.
- Barba-Sánchez, V., & Atienza-Sahuquillo, C. (2018). Entrepreneurial intention among engineering students: The role of entrepreneurship education. *European Research on Management and Business Economics*, 24(1), 53-61.
- BarNir, A., Watson, W. E., & Hutchins, H. M. (2011). Mediation and moderated mediation in the relationship among role models, self- efficacy, entrepreneurial career intention, and gender. *Journal of Applied Social Psychology*, 41(2), 270-297.
- Beaman, L., Duflo, E., Pande, R., &Topalova, P. (2012). Female leadership raises aspirations and educational attainment for girls: A policy experiment in India. *Science*, 335(6068), 582-586.



- Bosma, N., Hessels, J., Schutjens, V., Van Praag, M., & Verheul, I. (2012). Entrepreneurship and role models. *Journal of Economic Psychology*, 33(2), 410-424.
- Boyd, N. G., & Vozikis, G. S. (1994). The influence of self-efficacy on the development of entrepreneurial intentions and actions. *Entrepreneurship Theory and Practice*, 18(4), 63-77.
- Brownhilder, N. N. (2014). An assessment of entrepreneurial intention among university students in Cameroon. *Mediterranean Journal of Social Sciences*, 5(20), 542-55.
- Bygrave, W. D., & Zacharakis, A. (2004). *The portable MBA in entrepreneurship*. John Wiley & Sons.
- Carr, J. C., & Sequeira, J. M. (2007). Prior family business exposure as intergenerational influence and entrepreneurial intent: A theory of planned behavior approach. *Journal of Business Research*, 60(10), 1090-1098.
- Chambers, D., & Munemo, J. (2017). The impact of regulations and institutional quality on entrepreneurship. Mercatus Working Paper, Mercatus Center, George Mason University.
- Chaudhary, H. & Jain, S. K., (2017). Impact of Entrepreneurship Education on entrepreneurial intentions of potential entrepreneurs in India. In *Entrepreneurship Education* (pp. 289-303). Springer, Singapore.
- Cheung, C. K., & Chan, R. Y. C. (2011). The introduction of entrepreneurship education to school leavers in a vocational institute. *International Journal of Scientific Research in Education*, 4(2011), pp. 8-16
- Chlosta, S., Patzelt, H., Klein, S. B., & Dormann, C. (2012). Parental role models and the decision to become self-employed: The moderating effect of personality. *Small Business Economics*, 38(1), 121-138.
- Choo, S., & Wong, M. (2006). Entrepreneurial intention: triggers and barriers to new venture creations in Singapore. *Singapore Management Review*, 28(2), 47-64.
- Caliendo, M., Fossen, F. M., & Kritikos, A. S. (2009). Risk attitudes of nascent entrepreneurs—new evidence from an experimentally validated survey. *Small Business Economics*, 32(2), 153-167.
- Cook, M. L. & Burrell, M. J., (2010). A primer on collective entrepreneurship: A preliminary taxonomy.
- Cooper, A. C., Gimeno-Gascon, F. J., & Woo, C. Y. (1994). Initial human and financial capital as predictors of new venture performance. *Journal of Business Venturing*, 9(5), 371-395.
- Crant, J. M. (1996). The proactive personality scale as a predictor of entrepreneurial intentions. *Journal of Small Business Management*, 34, 42-49.



- Criscuolo, C., Gal, P. N., & Menon, C. (2014). The dynamics of employment growth.
- Davidsson, P., & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18(3), 301-331.
- Curran, J., & Blackburn, R. (2001). Older people and the enterprise society: Age and self-employment propensities. *Work Employment and Society*, 15(4), 889-902.
- Díaz-García, C., Sáez-Martínez, F., & Jiménez-Moreno, J. (2015). Assessing the impact of the “Entrepreneurs” education programme on participants’ entrepreneurial intentions. *International Journal of Educational Technology in Higher Education*, 12(3), 17-31.
- De Bruin, A., Brush, C. G., & Welter, F. (2006). Introduction to the special issue: Towards building cumulative knowledge on women's entrepreneurship. *Entrepreneurship Theory and practice*, 30(5), 585-593.
- Delmar, F., & Davidsson, P. (2000). Where do they come from? Prevalence and characteristics of nascent entrepreneurs. *Entrepreneurship & Regional Development*, 12(1), 1-23.
- De Wit, G., & De Kok, J. (2014). Do small businesses create more jobs? New evidence for Europe. *Small Business Economics*, 42(2), 283-295.
- Douhan, R., & Henrekson, M. (2007). The political economy of entrepreneurship: An introduction. *Research Institute of Industrial Economics Working Paper*.
- Ezeani, C. N., & Ugwu, F. N. (2013). Challenges of Entrepreneurship among University Graduates As Viewed By Post-Graduate Students in Two Universities in South East Nigeria. *International Journal of Research in Arts and Social Sciences*, 5, 416-434.
- Fairlie, R. W., & Robb, A. (2007). Families, human capital, and small business: Evidence from the characteristics of business owners’ survey. *ILR Review*, 60(2), 225-245.
- Farouk, A., Ikram, A., & Sami, B. (2014). The influence of individual factors on the entrepreneurial intention. *International Journal of Managing Value and Supply Chains*, 5(4), 47.
- Fishbein, M., & Ajzen, I. (1980). Understanding attitudes and predicting social behavior.
- Fereidouni, H. G., Masron, T. A., Nikbin, D., & Amiri, R. E. (2010). Consequences of external environment on entrepreneurial motivation in Iran. *Asian Academy of Management Journal*, 15(2), pp. 175-196
- Gibson, D. E., & Barron, L. A. (2003). Exploring the impact of role models on older employees. *Career Development International*, 8(4), 198-209.



- Gelard, P., & Saleh, K. E. (2011). Impact of some contextual factors on entrepreneurial intention of university students. *African Journal of Business Management*, 5(26), 10707.
- Grosanu, A., Bota-Avram, C., Rachisan, P. R., Vesselinov, R., & Tiron-Tudor, A. (2015). The influence of country-level governance on business environment and entrepreneurship: A global perspective. *Amfiteatru Economic Journal*, 17(38), 60-75.
- Goethner, M., Obschonka, M., Silbereisen, R. K., & Cantner, U. (2012). Scientists' transition to academic entrepreneurship: Economic and psychological determinants. *Journal of Economic Psychology*, 33(3), 628-641.
- Gurol, Y., & Atsan, N. (2006). Entrepreneurial characteristics amongst university students: Some insights for entrepreneurship education and training in Turkey. *Education and Training*, 48(1), 25-38.
- Gupta, V. K., Turban, D. B., Wasti, S. A., & Sikdar, A. (2009). The role of gender stereotypes in perceptions of entrepreneurs and intentions to become an entrepreneur. *Entrepreneurship Theory and Practice*, 33(2), 397-417.
- Hart, M., Anyadike-Danes, M., & Blackburn, R. (2004, November). Spatial differences in entrepreneurship: a comparison of prime age and third age cohorts. In *IGU Congress, Glasgow*.
- Herrington, M., Kew, J., & Kew, P. (2009). Global entrepreneurship monitor, South African report. *Cape Town: University of Cape Town*.
- Hills, G. E. (1988). Variations in university entrepreneurship education: An empirical study of an evolving field. *Journal of Business Venturing*, 3(2), 109-122.
- Hmieleski, K. M., & Baron, R. A. (2009). Entrepreneurs' optimism and new venture performance: A social cognitive perspective. *Academy of Management Journal*, 52(3), 473-488.
- Isaacs, E., Visser, K., Friedrich, C., & Brijlal, P. (2007). Entrepreneurship education and training at the Further Education and Training (FET) level in South Africa. *South African Journal of Education*, 27(4), 613-630.
- Israr, M., & Saleem, M. (2018). Entrepreneurial intentions among university students in Italy. *Journal of Global Entrepreneurship Research*, 8(1), 20-27.
- Jakopec, A., Krekar, I. M., and Susanj, Z. (2013). Predictors of entrepreneurial intentions of students of Economics, *Studia Psychologica*, 55(44), 1-14
- Jia, J., Wang, G., Zhao, X. N., & Yu, X. (2014). Exploring the relationship between entrepreneurial orientation and corporate performance. *Nankai Business Review International*, 5(3), 326-344



- Kautonen, T. (2008). Understanding the older entrepreneur: Comparing third age and prime age entrepreneurs in Finland. *International Journal of Business Science & Applied Management (IJBSAM)*, 3(3), 3-13.
- Kelley, D.J., Singer, S., and Herrington, M. (2012), "Global entrepreneurship monitor". In: G.E.R.A. (Ed.), *Global Entrepreneurship Monitor*. Babson Park, MA / Santiago, Chile / Kuala Lumpur, Malaysia / London, United Kingdom: Babson College / Universidad del Desarrollo / Universiti Tun Abdul Razak / London Business School.
- Kenosi, P. Q. (2006). *Entrepreneurship through the Junior Achievement Botswana Programme: realities and perceptions* (Doctoral dissertation). University of Kwazulu Natal.
- Khalifa A.H. & Dhiaf M.M. (2016). The impact of entrepreneurship education on entrepreneurial intention: The UAE Context. *Polish Journal of Management Studies*, 14. 119-128.
- Khan, S. J. M., & Anuar, A. R. (2018). Access to finance: exploring barriers to entrepreneurship development in SMEs. In *Global Entrepreneurship and New Venture Creation in the Sharing Economy* (pp. 92-111). IGI Global.
- Koellinger, P. D., & Roy Thurik, A. (2012). Entrepreneurship and the business cycle. *Review of Economics and Statistics*, 94(4), 1143-1156.
- Kolvereid, L. (1996). Prediction of employment status choice intentions. *Entrepreneurship Theory and practice*, 21(1), 47-58.
- Kourilsky, M. L., & Walstad, W. B. (1998). Entrepreneurship and female youth: Knowledge, attitudes, gender differences, and educational practices. *Journal of Business Venturing*, 13(1), 77-88.
- Krueger, N. F., & Carsrud, A. L. (1993). Entrepreneurial intentions: Applying the theory of planned behaviour. *Entrepreneurship & Regional Development*, 5(4), 315-330.
- Kristiansen, S., & Indarti, N. (2004). Entrepreneurial intention among Indonesian and Norwegian students. *Journal of Enterprising Culture*, 12(01), 55-78.
- Lakovleva, T., & Kolvereid, L. (2009). An integrated model of entrepreneurial intentions. *International Journal of Business and Globalisation*, 3(1), 66-80.
- Liñán, F., Nabi, G., & Krueger, N. (2013). British and Spanish entrepreneurial intentions: A comparative study. *World Economic Magazine*, (33), 73-103.
- Lindsay, N. J. (2005). Toward a cultural model of indigenous entrepreneurial attitude. *Academy of Marketing Science Review*, 2005, 1.



- Lockwood, P. (2006). "Someone like me can be successful": Do college students need same-gender role models? *Psychology of Women Quarterly*, 30(1), 36-46.
- Luke, B., Verreyne, M. L., & Kearins, K. (2007). Measuring the benefits of entrepreneurship at different levels of analysis. *Journal of Management & Organization*, 13(4), 312-330.
- Luc, P. T. (2018). The relationship between perceived access to finance and social entrepreneurship intentions among university students in Vietnam. *The Journal of Asian Finance, Economics and Business*, 5(1), 63-72.
- Maree, K. (ed). (2007). First steps in Research. Pretoria: van Schaik.
- Mbogo, M. (2011). Influence of Managerial Accounting Skills on SME's on the Success and Growth of Small and Medium Enterprises in Kenya. *Journal of Language, Technology & Entrepreneurship in Africa*, 3(1), 109-132.
- McElwee, G., & Al- Riyami, R. (2003). Women entrepreneurs in Oman: some barriers to success. *Career Development International*.
- Merigo, J. M., Peris-Ortiz, M., & Palacios-Marques, D. (2014). Entrepreneurial fuzzy group decision-making under complex environments. *Journal of Intelligent & Fuzzy Systems*, 27(2), 901-912.
- Mike Peters & Andreas Kallmuenzer (2018) Entrepreneurial orientation in family firms: the case of the hospitality industry, *Current Issues in Tourism*, 21(1), 21-40
- Momanyi, M. E., & Munene, C. (2013). Factors Affecting Financial Performance of Youth Owned Enterprises Kenya: A case of Youth Owned Enterprises in Kisii Town.
- Murphy, P. J., Liao, J., & Welsch, H. P. (2006). A conceptual history of entrepreneurial thought. *Journal of management history*, 12(1), 12-35
- Munemo, J. (2012). Entrepreneurship in developing countries: is Africa different? *Journal of Developmental Entrepreneurship*, 17(01), 1250004.
- Muranda, Z., Mphela, T., & Nyakudya, M. (2011). Entrepreneurship policy, enterprise diversification and the motivation factor: the case of Botswana. *Journal of Social Development in Africa*, 26(1), 75.
- Naudé, W. (2010). Entrepreneurship, developing countries, and development economics: new approaches and insights. *Small Business Economics*, 34(1), 1.
- Nicolaidis, A. (2011). Entrepreneurship-the role of higher education in South Africa. *International Educational research*, 2(4), 1043-1050.



- Nochian, N., & Schott, T. (2012). Entrepreneurs' confidence in innovation and their innovativeness. *Economic Review: Journal of Economics & Business*, 10(1), 25-32.
- Opusunju, M, I, Zwingina, T, C, Murat, A and Jiya, N, S. (2018) Effects of political environment on entrepreneurship development: A small business perspective in Abuja, FCT. *Operational Research in Management, Social Sciences & Education*, 4(2), pp. 90-103
- Olvecka, V. (2013). Development of entrepreneurial environment in Slovakia. *Intellectual Economy* 7(2), pp. 216-229.
- Ozaralli, N., & Rivenburgh, N. K. (2016). Entrepreneurial intention: antecedents to entrepreneurial behavior in the USA and Turkey. *Journal of Global Entrepreneurship Research*, 6(1), 3.
- Osemeke, M. (2012). Entrepreneurial development and interventionist agencies in Nigeria. *International journal of business and social science*, 3(8), 255-265.
- Phan, P. H., Wong, P. K., & Wang, C. K. (2002). Antecedents to entrepreneurship among university students in Singapore: Beliefs, attitudes and background. *Journal of Enterprising Culture*, 10(02), 151-174.
- Pounder, P., & Devonish, D. (2016). Understanding Entrepreneurial Attitudes, Intentions and Activity in Barbados. *Caribbean Educational Research Journal*, 4(1), 79-96.
- Popescu, C. C., Bostan, I., Robu, I. B., & Maxim, A. (2016). An analysis of the determinants of entrepreneurial intentions among students: A Romanian case study. *Sustainability*, 8(8), 771.
- Quan-li, S. H. I. (2012). On Target Localization and Contents of Innovation and Entrepreneurship Education in Colleges and Universities [J]. *Journal of Changzhou Vocational College of Information Technology*, 6.
- Ramoni, S. A. (2016). Determinants of entrepreneurial intention among Nigerian university graduates. *World Journal of Social Sciences*, 6(1), 45-59.
- Raijman, R. (2001). Determinants of entrepreneurial intentions: Mexican immigrants in Chicago. *The Journal of Socio-Economics*, 30(5), 393-411.
- Ritsilä, J., & Tervo, H. (2002). Effects of unemployment on new firm formation: Micro-level panel data evidence from Finland. *Small business economics*, 19(1), 31-40.
- Seelos, C., Mair, J., Battilana, J., & Dacin, M. T. (2011). The embeddedness of social entrepreneurship: Understanding variation across local communities. *Research in the Sociology of Organizations*, 33(4), 333-363.



- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217-226.
- Shay, J., & Terjensen, S. (2005). Entrepreneurial aspirations and intentions of business students: A gendered perspective. In *Paper presented at the Babson Entrepreneurship Conference, Boston, MA*.
- Shree, S., & Urban, B. (2012). Internationalisation of South African SMEs: The role of capital factors. *Trade Journal*, 12(1), 186-199.
- Sasu, C., & Sasu, L. (2015). Demographic determinant of the entrepreneurship intentions. The case of Romania. *Procedia Economics and Finance*, 20(232), 580-585.
- Schoof, U. (2006). *Stimulating Youth Entrepreneurship: Barriers and incentives to enterprise start-ups by young people*. International Labour Organization. Working Paper No. 76, Geneva, (Switzerland)
- Solesvik, M. Z. (2013). Entrepreneurial motivations and intentions: investigating the role of education major. *Education and Training*, 55(3), 253-271.
- Smith, B. R., Kistruck, G. M., & Cannatelli, B. (2016). The impact of moral intensity and desire for control on scaling decisions in social entrepreneurship. *Journal of Business Ethics*, 133(4), 677-689.
- Smit, Y., & Watkins, J. A. (2012). A literature review of small and medium enterprises (SME) risk management practices in South Africa. *African Journal of Business Management*, 6(21), 6324.
- Teixeira, S. J., Casteleiro, C. M. L., Rodrigues, R. G., & Guerra, M. D. (2018). Entrepreneurial intentions and entrepreneurship in European countries. *International Journal of Innovation Science*, 10(1), 22-42.
- Tshikovhi, N., & Shambare, R. (2015). Entrepreneurial knowledge, personal attitudes, and entrepreneurship intentions among South African Enactus students. *Problems and Perspectives in Management*, 13(1), 152-158.
- Troilo, M. (2011). Legal institutions and high-growth aspiration entrepreneurship. *Economic Systems*, 35(2), 158-175.
- Tur-Porcar, A., Roig-Tierno, N., & Llorca Mestre, A. (2018). Factors affecting entrepreneurship and business sustainability. *Sustainability*, 10(2), 452.



- Ugwu, F. N. (2012). Evaluation of entrepreneurship awareness and skills among LIS students in universities in South East Nigeria. *Library Philosophy and Practice*, 1.
- Usman, U. S. (2016). *Factors Influencing Entrepreneurial Intention among Muslim Undergraduate Students: A Case Study of United States International University-Africa* (Doctoral dissertation, United States International University-Africa).
- Uysal, S. D., & Pohlmeier, W. (2011). Unemployment duration and personality. *Journal of Economic Psychology*, 32(6), 980-992.
- Uddin, M. R., & Bose, T. K. (2012). Determinants of entrepreneurial intention of business students in Bangladesh. *International Journal of Business and Management*, 7(24), 128.
- Valdez, M. E., & Richardson, J. (2013). Institutional determinants of macro-level entrepreneurship. *Entrepreneurship Theory and Practice*, 37(5), 1149-1175.
- Van der Sluis, J., & van Praag, M. (2004). Economic returns to education for entrepreneurs: The development of a neglected child in the family of economics of education? *Swedish Economic Policy Review*, 11(2), 183-226.
- Verheul, I., & Van Stel, A. (2010). Entrepreneurial diversity and economic growth. *The Entrepreneurial Society*, 17-36.
- Weber, P., & Schaper, M. (2004). Understanding the grey entrepreneur. *Journal of Enterprising Culture*, 12(02), 147-164.
- Wibowo, B. (2017). Religiosity and entrepreneurial intention. *Ethiconomics*, 16(2), 187-206.
- World Bank (2020). The World Bank in Botswana. Retrieved from: <https://www.worldbank.org/en/country/botswana/overview> [Accessed 04 April 2020]
- Yamane, T. (1967) *Statistics: An Introductory Analysis*, (2<sup>nd</sup> Ed.), New York: Harper and Row.
- Zhao, H., Seibert, S. E., & Hills, G. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, 90(6), 1265.
- 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.