

# Effects of Entrepreneurship Education on Students' Entrepreneurial Intentions: A Case of Botswana

Patrick Ebong Ebewo, Robert Rugimbana

Tshwane University of Technology, Tshwane, South Africa

Richard Shambare

University of Venda, Venda, South Africa

The purpose of this research was to assess the impact of entrepreneurship education on university students' intentions towards entrepreneurship. To test this relationship and attempt to answer the research question "*to what extent does University-level entrepreneurship education influence students' entrepreneurial intentions?*" a conceptual model supported by the theory of Planned Behaviour was adopted. Data were gathered from 343 final year students at the University of Botswana using a validated Entrepreneurship Intention Questionnaire. The results provide evidence that all three immediate antecedents of entrepreneurial intention; attitude towards entrepreneurship, subjective norm and perceived behavioural control (perceived entrepreneurial abilities) directly influence entrepreneurial intention. Participation in entrepreneurship education was observed to positively influence students' intention to become an entrepreneur by changing their attitude towards entrepreneurship and increasing their entrepreneurial abilities. The implication is that the university curriculum should be redesigned in order to stimulate an environment that is conducive for developing positive entrepreneurial attitudes and abilities. Based on the above, it is recommended that (a) entrepreneurship education subjects be offered as core subjects in the first and final years at the University of Botswana and students' assessments should incorporate linking projects with small firms, (b) the University of Botswana Business Clinic should establish a venture accelerator programme by providing seed funding and an entrepreneurship-mentorship programme. Policymakers need to understand that government initiatives will affect business formations only if these initiatives affect attitudes, entrepreneurial abilities, and subjective norms, which could motivate young people to start a promising enterprise. The objective of the promotion of entrepreneurship policy in Botswana should be to increase the number of individuals considering business start-ups through more determined entrepreneurship education initiatives.

*Keywords:* entrepreneurial intentions, entrepreneurial abilities, entrepreneurship, entrepreneurship education, university education, Botswana

## Introduction

---

Patrick Ebong Ebewo, Master of Technology, Entrepreneurship, Coordinator, Arts Business Incubator, Tshwane University of Technology, South Africa.

Robert Rugimbana, professor, executive dean, Faculty of Economic and Finance, Tshwane University of Technology, South Africa.

Richard Shambare, doctor of Technology (DTech), senior lecturer, Business Administrator, University of Venda, South Africa.

Correspondence concerning this article should be addressed to Patrick Ebong Ebewo, 24 Du Toit Street, Pretoria, 0007, South Africa.

Globally, the issue of entrepreneurship education amongst university students, and the fostering of entrepreneurship activity, are increasingly becoming important (Movahedi, Fathi, & Brijal, 2011). This is particularly true in emerging economies, where unemployment levels are high (International Labour Organization, 2011) and entrepreneurial activity is needed. In Botswana, as an example the unemployment rate is approximately 18 per cent, with the majority of unemployed being youths 18 to 34 years old (Statistics Botswana, 2011). Consequently, authors such as (Lekoko, 2011), government and policymakers have challenged Botswana's institutions of higher learning to intervene by promoting and encouraging student-driven entrepreneurship. Given that universities are viewed as agents for socio-economic development (Lüthje & Franke, 2003), Lekoko's (2011) arguments for transforming universities into entrepreneurial education and activity hubs are deserving of further inquiry.

Lekoko's (2011) arguments are echoed in literature. For instance, Shapero and Sokol (1982) suggested that educational institutions can have wide-ranging impact on students' career choices; specifically that universities have the potential to act as important triggering vehicles for entrepreneurship. Also Luthje and Franke (2003) argued that for universities to be relevant to socio-economic development, their curricula should not only teach a "theoretic" understanding of entrepreneurship, but also cultivate an environment conducive to developing new innovations and business start-ups (Liñán, Rodríguez-Cohard, & Rueda-Cantuche, 2010). According to these arguments, in the context of a developing nation such as Botswana, the role of universities should be improving awareness of entrepreneurial benefits through (a) entrepreneurship education and (b) encouraging venture-creation among students. While there is a rationale for supporting entrepreneurship at tertiary education level, Lekoko (2011) cautioned that getting students to engage in entrepreneurial activity is usually not straightforward.

In the context of increasing unemployment in Botswana, only few graduates from University of Botswana engaged in entrepreneurship (Gregory, 2011). Considering that most students enrolled at the University of Botswana should have been exposed to entrepreneurship-related courses at some stage of their study, and knowing that about 24 per cent of University of Botswana graduates are unemployed (Gregory & Lekoko, 2011), it is reasonable to investigate the relationship between entrepreneurship education and University of Botswana students' intentions towards entrepreneurship. Thus, this forms the rationale for this study. The rest of this article will discuss literature on entrepreneurship, entrepreneurial intentions, and entrepreneurship education, followed by research question, methodology, discussion on findings, finally conclusion and recommendation will be drawn.

## **Literature Review**

The multiple conceptualisations of entrepreneurship relate to the functional roles of entrepreneurs. These include attributes such as coordination, innovation, uncertainty bearing, capital supply, decision making, ownership, and resource allocation (Friijis, Paulsson, & Karlsson, 2002). By its very nature, entrepreneurship is not a static phenomenon, rather it is a process through which opportunities to create businesses are discovered, evaluated, and exploited (Shane & Venkataram, 2000; Hart, 2003). For the purpose of this study, entrepreneurship was defined as the "process of starting and continuing to expand new businesses" (Hart, 2003). To better understand the entrepreneurial process, several researchers (such as Liñán, Rodríguez-Cohard, & Rueda-Cantuche, 2010; Liñán, & Chen, 2009; Forbes, 2005) have studied individuals' entrepreneurial intentions.

Ajzen's (1991) theory of Planned Behaviour has been extensively applied in the last decades to study individuals' entrepreneurial intentions (Liñán et al., 2010; Liñán & Chen, 2009; Forbes, 2005; Lüthje & Franke, 2003; Autio, Keeley, Klofsten, Parker, & Hay, 2001; Chen, Greene, & Crick, 1998; Davidsson, 1995; Krueger & Carsrud, 1993). The theory of Planned Behaviour is an important framework for understanding, predicting, and changing human social behaviour (Ajzen, 2012). According to the theory, intentions are the immediate antecedent of behaviour. These intentions to act are determined by three variables: attitude toward the specific behaviour—only specific attitudes toward the behaviour can be expected to predict that behaviour; subjective norms—beliefs about how people the decision-maker cares about will view the behaviour in question, and; perceived behavioural control—which refers to people's perceptions of their ability to perform a given behaviour (Ajzen, 2011, 2012; Kolvareid, 1996). In combination, attitude towards the behaviour, subjective norm, and perception of behavioural control leads to the formation of a behavioural intention (Ajzen, 2002). Entrepreneurial intention refers to an individual plan to start a new business (Engle, Dimitriadi, Gavidia, Schlaegel, Delanoe, Alvarado, He, Buame, & Wolff, 2010; Liñán & Chen, 2009; Krueger, Reilly, & Carsrud, 2000).

The research model presented in Figure 1, presents the model of behavioural intentions that this study proposes and tests, and indicates the relationships between the variables influencing entrepreneurship intentions. Entrepreneurship intention is considered as the focal dependent variable in the study. The independent variables are: attitude towards entrepreneurship, subjective norms, perceived entrepreneurial abilities, and entrepreneurship education. Entrepreneurship education is an important exogenous factor to include in entrepreneurial intention models in that it directly influences students' inclination towards entrepreneurship (Liñán & Chen, 2009) and therefore is incorporated in this study's research model.

According to Alberti, Sciascia, and Poli (2005), entrepreneurship education is the structured formal conveyance of entrepreneurial concepts, skills and awareness used by individuals during the process of starting and developing their growth oriented ventures (Hynes & Richardson, 2007). Entrepreneurship education involves more than just educating people to start up new ventures, and it is also about equipping students with the knowledge, skills, and competencies required to engage in a more enterprising, innovative and flexible manner within an ever-changing environment. In agreement, Refaat (2009) noted that entrepreneurship education and training allow students to develop and use their creativity and to take initiatives, responsibilities, and risks.

Entrepreneurship education is therefore crucial in assisting youths to develop entrepreneurial skills, attitudes, and behaviours to understand entrepreneurship as a career option, and to develop positive entrepreneurial intentions (Charney & Libecap, 2000; Kuratko, 2003; Schoof, 2006). Based on this view of the role of entrepreneurship education, in 1996, the Government of Botswana introduced Vision 2016, an initiative aimed at promoting entrepreneurship education, economic growth and supporting the diversification agenda in the country (Botswana Vision, 2016; Cloete, Bailey, Pillay, Bunting, & Maassen, 2011). Through the establishment of the University of Botswana Business Clinic (Business Clinic), the University of Botswana has strategically aligned its mission to the country's vision of developing youth in entrepreneurship (Mafela, 2009). The Business Clinic assists students to establish and run their businesses (University of Botswana, 2008). It further provides students with the platform to participate in practical entrepreneurial training, offering advisory and mentoring services (such as company registration, development of business plans, preparing accounts and marketing of products) to aspiring entrepreneurs and enterprise owners (Mafela, 2009). For the purposes of this

research, the UB Business Clinic was considered as an entrepreneurship education programme, and a site for the empirical research.

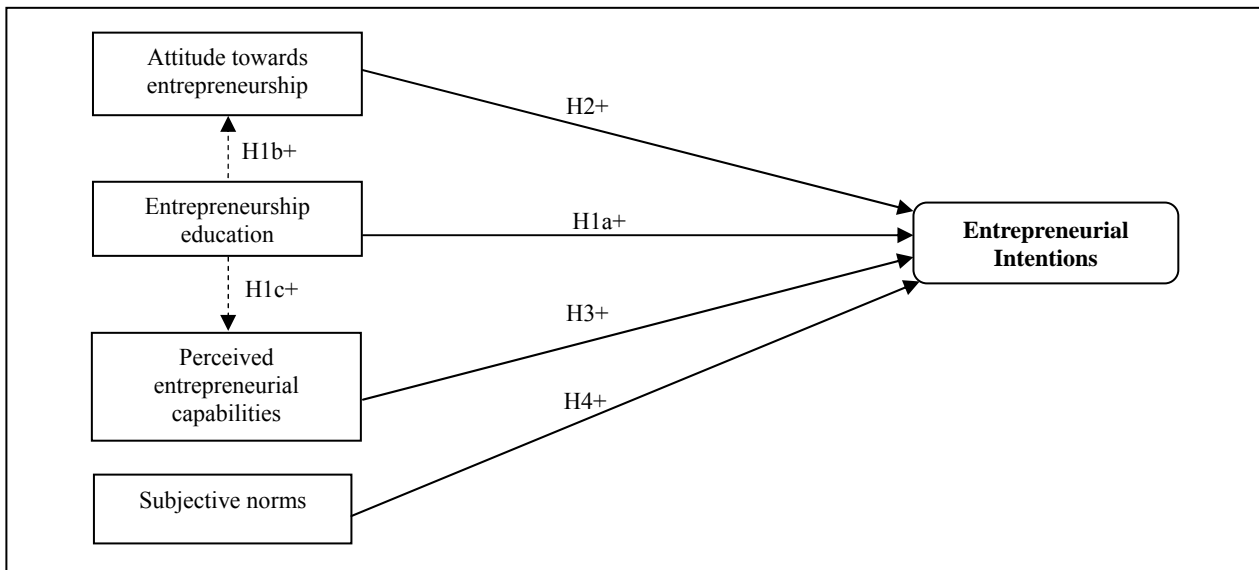


Figure 1. The research model (Ajzen, 2011; Liñán & Chen, 2009).

### Research Problem

Based on the above background and literature, the research problem for the study is expressed as: *Despite proactive intervention by the University of Botswana to incorporate practical business training (in the form of a Business Clinic) together with entrepreneurship education, graduates are still reluctant to consider entrepreneurship as a viable career option, even in an environment of high job scarcity.*

### Research Question

To address the above-stated problem, the research question is formulated as follows: *To what extent does university-level entrepreneurship education influence students' entrepreneurial intentions?*

### Hypotheses

The above-stated question is investigated using the following hypotheses:

H<sub>1a</sub>: Students' participation in entrepreneurial education is positively related to entrepreneurial intentions.

H<sub>1b</sub>: Students' participation in entrepreneurial education is positively related to attitude towards entrepreneurship as a career option.

H<sub>1c</sub>: Students' participation in entrepreneurial education is positively related to perceived entrepreneurial abilities.

H<sub>2</sub>: Students' positive attitude towards entrepreneurship as a career option positively influences entrepreneurial intentions.

H<sub>3</sub>: Perceptions of students' entrepreneurial abilities are positively related to entrepreneurial intentions.

H<sub>4</sub>: Students' subjective norms are positively related to entrepreneurial intentions.

### Research Methods

A descriptive survey was conducted with a sample of three hundred and forty three ( $n = 343$ ) final year students of the University of Botswana. The choice to select final year students was based on the fact that they

are expected to seek gainful employment or start businesses soon after graduation. This study utilised a stratified random sampling technique, in which respondents were randomly drawn from a stratum of seven faculties (Business, Education, Science, Engineering & Technology, Social Science, Humanities, and Health Sciences). The self-administered survey instrument developed for this study, the Entrepreneurship Intention Questionnaire, utilises validated scales, adapted from previous studies (Liñán & Chen, 2009; Forbes, 2005; Luthje, & Franke, 2003). This instrument was modified to suit the Botswana context. Data were analysed using SPSS version 20.0. Descriptive statistics and several multivariate statistical tests were performed, including tests for reliability and regression analysis for testing hypotheses (Field, 2009). Data analysis was performed in order to explain the characteristics of the sample and primarily to test the proposed conceptual model.

### Research Results

The total sample size across the seven faculties was 343 respondents ( $n = 343$ ), proportionately represented as: 78 (22.7%) from Business, Education 55 (16%), Science 18 (5.2%), Engineering & Technology 48 (14%), Social Science 65 (19%), Humanities 68 (19.8%), and Health Sciences 11 (3.2%). Some 38.5% of respondents were male and 211 (61.5%) were female. The majority of respondents (80.5%) are between 16-25 years, 15.2% are 26-35 years and 4.4% are older than 36 years. Of the 343 respondents, only 23 (6.7%) were self-employed, 138 (40.2%) participated in entrepreneurship education, and 43 (12.5%) were Business Clinic members.

Most respondents agreed to statements regarding attitude towards entrepreneurship as a career option. About 43% of the respondents disagreed that among the various career options, they would be anything but an entrepreneur, however, to whether being an entrepreneur would give them great satisfaction, only 13.7% disagreed and 58.6% agreed. With regards to subjective norm, 57.7% respondents indicated that their friends would approve of their decision to start a business, and 52.8% agreed that their friends value entrepreneurship as a career option, with only 17.5% and 14% disagreeing respectively. Although 18.1% of respondents disagreed, only 48.1% agreed that their immediate family values entrepreneurship as a career option. In spite of this, 65.3% respondents indicated that their immediate family would approve of their decision to start a business, and 13.4% disagreed with this statement.

With a minimum mean of 3.43, most respondents agreed to the statements regarding their perceived entrepreneurial abilities. For example, 64.8% agreed that they believe they can successfully develop a new business, 67.9% agreed that they believe they can think creatively in business. Fifty eight per cent of respondents indicated that they can identify potential new venture funding and 63.5% believed they can create products or services that fulfil customers' unmet needs, which are similar to responses (63.9%) when asked whether they believe they can identify new business opportunities.

The study results also show that, although 63.2% of respondents will make every effort to establish their own business, only 33.3% of respondents (Figure 2) indicated that they are determined to create a business venture within the next 12 months. This percentage increases to 55.7% for a five years' period and 61.8% for 10 years.

The most commonly reported sectors are real estate (118) (architecture and construction), agriculture (110), and tourism and hospitality (91). Nineteen respondents showed interest in sectors such as renewable energy, media, and entertainment as well as home-based, catering and legal advisory services. Only 17 respondents showed interest in mining, which has traditionally been the greatest employment generator in Botswana. These figures reflect the economic diversification in Botswana, which has been a priority for the government.

Table 1  
*Demographic Profile of the Sample*

Demographic characteristic		Frequency	Percent
Gender	Male	132	38.5
	Female	211	61.5
Age	< 25 years	276	80.5
	26-35 years	52	15.2
	> 36 years	15	4.4
Faculty of study	Business	78	22.7
	Education	55	16.0
	Science	18	5.2
	Social Sciences	65	19.0
	Health Sciences	11	3.2
	Humanities	68	19.8
	Engineering & Technology	48	14.0
<i>Students self-employed status</i>	Yes	23	6.7
	No	320	93.3
<i>Participated in theoretical entrepreneurship education</i>	Yes	138	40.2
	No	205	59.8
<i>Business clinic membership (experimental/practical entrepreneurship education)</i>	Yes	43	12.5
	No	300	87.5

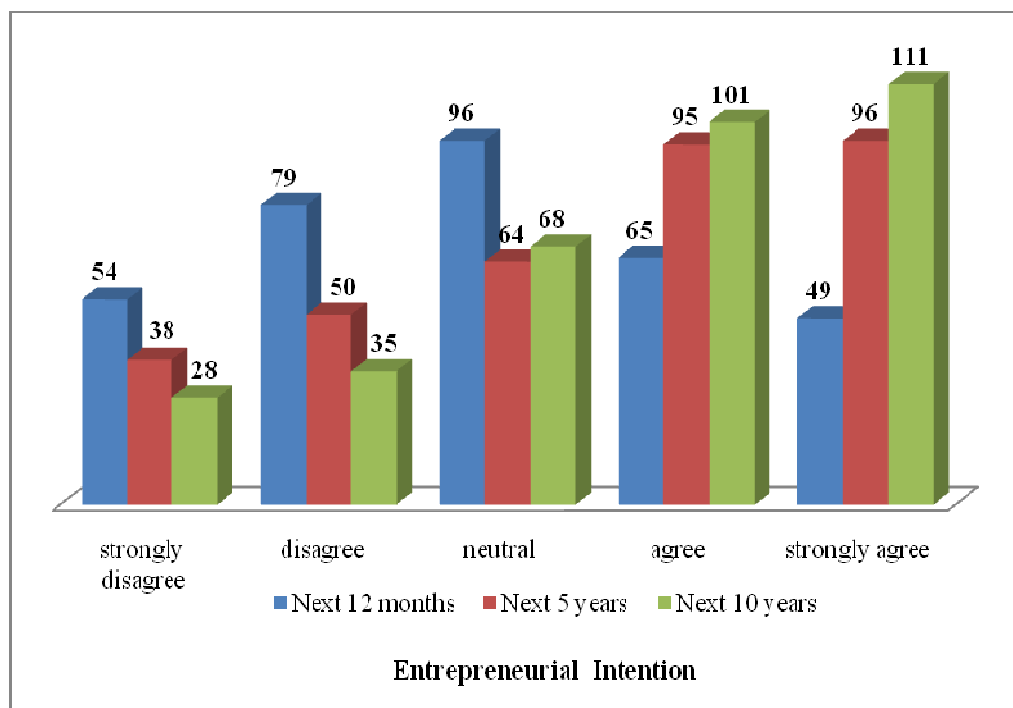


Figure 2. Entrepreneurship intention of 12 months, 5 years, and 10 years.

The regression output in Table 2 generally supports hypotheses 2 and 3. Attitude towards entrepreneurship as a career option ( $\beta = 0.378$ ) and perceived entrepreneurial abilities of students' ( $\beta = 0.363$ ) both positively influence entrepreneurial intentions. Both hypotheses 2 and 3 can be accepted at a  $p < 0.001$  significance level.

These findings correspond with past research (Ajzen, 2012; Movahedi & Fathi, 2011; Liñán & Chen, 2009; Souitaris, Zerbini, & AL-Laham, 2007; Hannan et al., 2004). This confirms that attitudes can be viewed as the stepping stone to entrepreneurial intentions, thus, to increase the level of entrepreneurial initiative among students it is necessary to increase positive attitudes towards entrepreneurship. Research has shown that an individual's behaviour is highly influenced by confidence in their ability to perform the behaviour necessary to be successful (Swann, Chang-Schneider, & Larsen Mccarty, 2007). The study results correspond to past empirical studies (Chen, Greene, & Crick, 1998; Zhao, Hills, & Seibert, 2005; Forbes, 2005; Krueger, Reilly, & Carsrud, 2000) that individuals with high entrepreneurial self-efficacy are more likely to be entrepreneurs than those with low entrepreneurial self-efficacy.

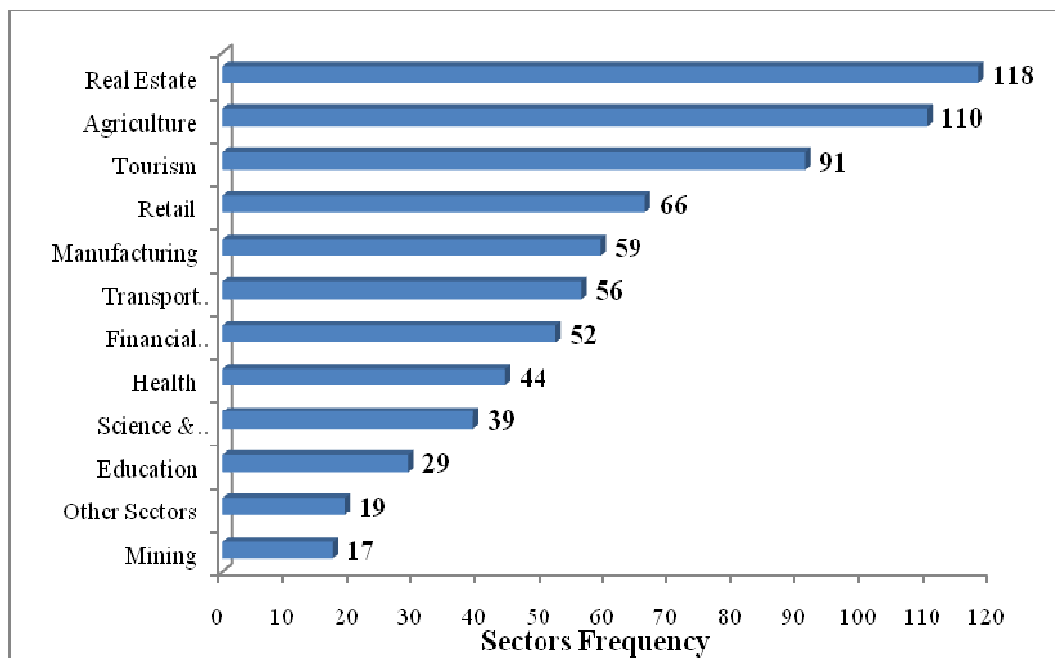


Figure 3. Interested sector.

The regression table also shows a positive relationship for subjective norms ( $\beta = 0.164$ ). At a  $p < 0.027$  significance level, hypothesis 4 is therefore accepted. Several studies found a significant impact of subjective norms on intentions (Engle et al., 2010; Kolvereid, 1996; Kolvereid & Isaksen, 2006; Tkachev & Kolvereid, 1999; Alsos, Isaksen, & Softing, 2006), while other studies do not support this finding (Autio et al., 2001; Krueger et al., 2000; Liñán & Chen, 2009). Liñán and Chen (2009) proposed that one explanation may be differences in the measurement of subjective norms across studies.

The analysis indicates that student's participation in theoretical entrepreneurial education ( $\beta = -0.076$ ) is negatively related to entrepreneurial intentions, and it is not significant ( $p < 0.209$ ) to entrepreneurial intentions of University of Botswana students. Therefore, hypothesis 1 is rejected. One possible explanation for these results may include the fact that the objective of the current entrepreneurship education is to develop (1) entrepreneurial drive among students (raising awareness and motivation), (2) the entrepreneurial ability to identify and exploit opportunities, and (3) training students in the skills they need to set up a business and manage its growth. This skill-set is useful in both employment and entrepreneurship conditions, and it is not the single objective of such subjects to encourage entrepreneurship as a career choice.

Table 2

*Model Summary and ANOVA*

Model Summary				
Model	R	R square	Adjusted R square	Std. error of the estimate
1	0.744 <sup>a</sup>	0.554	0.540	0.08854

a. Predictors: (Constant), EE, ATE, SN, PEA

ANOVA <sup>a</sup>						
Model		Sum of squares	Df	Mean square	F	Sig.
1	Regression	1.293	4	0.323	41.244	0.000 <sup>b</sup>
	Residual	1.043	133	0.008		
	Total	2.336	137			

a. Dependent variable: EI

b. Predictors: (Constant), EE, ATE, SN, PEA

Coefficients <sup>a</sup>						
Model		Unstandardised coefficients		Standardised coefficients	T	Sig.
		B	Std. error	Beta		
1	(Constant)	0.114	0.050		2.299	0.023
	ATE	0.241	0.045	0.378	5.355	0.000
	PEA	0.980	0.204	0.363	4.801	0.000
	SN	0.092	0.041	0.164	2.233	0.027
	EE	-0.055	0.043	-0.076	-1.262	0.209

a. Dependent variable: EI

Table 3

*Participation in Entrepreneurship Education Regression*

Items		Entrepreneurship subject	Business clinic membership
R		0.729	0.731
R square		0.531	0.534
Beta	ATE	0.435	0.379
	PEA	0.407	0.487
Significance level	ATE	0.001	0.004
	PEA	0.001	0.001

However, participation in experimental/practical entrepreneurship education (Business Clinic) is positively related to students' attitude towards entrepreneurship as a career option and their perceived entrepreneurial abilities. Hypotheses 1<sub>b</sub> and 1<sub>c</sub> can both be accepted at a significance level of  $p < 0.001$ . Students who participated in entrepreneurial education ( $\beta = 0.435$ ) show a positive attitude towards entrepreneurship as a career option. As can be seen from Table 3, there is strong support for hypothese 1<sub>c</sub>. Perceived entrepreneurial abilities ( $\beta = 0.407$ ) are successfully increased through participation in entrepreneurial education. Results of this study also show that participation in the Business Clinic does positively influence students' attitude towards entrepreneurship as a career option and belief in their abilities to be entrepreneurs (perceived entrepreneurial abilities).

The results also show a strong relationship among participation in the Business Clinic, students' attitude towards entrepreneurship as a career option ( $\beta = 0.379$ ,  $p < 0.004$ ), and perceived entrepreneurial abilities ( $\beta =$



0.487,  $p < 0.001$ ). It is reasonable and likely that students' belief in their ability to be entrepreneurs and business knowledge would be increased through participation in either entrepreneurship subjects or the Business Clinic. This indicates that students' attitude towards entrepreneurship and self-efficacy can be enhanced through additional forms of business tuition other than those specifically providing entrepreneurial training. Entrepreneurial training may occur in the form of university entrepreneurship education and/or entrepreneurial programmes.

### **Conclusion**

The primary purpose of this study was to examine the effects of entrepreneurship education on students' entrepreneurial intentions. The ability to account for imminent entrepreneurial behaviour through behavioural intentions models is of significance to university educators and public policy makers. The research finds that entrepreneurship education impacts entrepreneurship intentions through changes in students' attitude towards entrepreneurship as a career option and perceived entrepreneurial abilities (perceived entrepreneurial self-efficacy). Below are the theoretical implications of this research.

The findings of this research support the positive correlations among attitude towards entrepreneurship as a career option, perceived entrepreneurial abilities, and entrepreneurial intentions, which coincides with previous research that has investigated students' entrepreneurial intentions (Liñán et al., 2010; Liñán & Chen, 2009; Forbes, 2005; Lüthje & Franke, 2003, Autio et al., 2001; Chen, Greene, & Crick, 1998; Davidsson, 1995; Krueger & Carsrud, 1993). The study results also suggest that attitude towards entrepreneurship as a career option, and perceived entrepreneurial abilities, are both valuable for research into general awareness of entrepreneurship and more precisely entrepreneurial intentions. The results of this study provide additional insight into the benefits of pursuing entrepreneurship education to enhance both attitude towards entrepreneurship and entrepreneurial abilities. Furthermore, this research provides further support for the use of Ajzen's theory of Planned Behaviour (2012) as a model to test the antecedents to entrepreneurial intention.

In summary, the findings suggest that participation in experimental/practical entrepreneurship education can positively influence an individuals' intention to become an entrepreneur by changing their attitude towards entrepreneurship and increasing their entrepreneurial abilities. To learn more about entrepreneurship, it is not sufficient to study actions in hindsight alone; researchers, educators, and policymakers also need knowledge about the processes that would-be-entrepreneurs undergo on their way to the selection of entrepreneurship as a career choice.

Policymakers need to concentrate on informing young people about innovation-driven types of entrepreneurship. To achieve this, policymakers need to understand that government initiatives will affect business formations only if these initiatives affect attitudes, entrepreneurial abilities, and subjective norms, which could motivate young people to start a promising enterprise. Taking into consideration that the study found students' attitude towards entrepreneurship as a career option and perceived entrepreneurial abilities to be the most important antecedents of entrepreneurial intentions, policymakers would be well advised to develop a strategy to stimulate education about entrepreneurship at all levels (primary, secondary, and tertiary), and through specialised centres such as a centre for enterprise development, manufacturing and renewable energy incubators. Although the government of Botswana has significantly funded the promotion and development of entrepreneurship education as articulated by the National Development Plan (Botswana's Vision 2016), there is little policy clarity about whether outputs are designed to create entrepreneurs, general education, business

education, improved employability, or enterprise skills. This lack of clarity about the intended outputs leads to significant diversity surrounding the inputs, such as contradictory policies, major differences over pedagogy, and differences in institutional implementation. Accordingly, the Botswana government needs to invest in research that specifically examines entrepreneurship education in order to improve the evidence base, evaluate the impact of interventions and thereby produce a clearer idea of what policies might work more effectively and in which contexts.

The study findings also suggest that entrepreneurship should not only be studied by the students in the Faculty of Business, but should be studied by students in all departments and programmes in the University of Botswana. The implication is that the University of Botswana curriculum should be redesigned in order to stimulate an environment that is conducive for developing positive entrepreneurial attitudes and abilities. As a minimum, entrepreneurship education subjects should be offered as core subjects in the first and final years to encourage students to value and to cultivate more appreciation for entrepreneurship as a career. Although entrepreneurship education should provide a mechanism through which students' awareness of entrepreneurship can be raised and change of perception about entrepreneurship fostered (Refaat, 2009), any entrepreneurial education programme to be introduced should provide students training in the essential competencies, such as management, finance, and marketing competencies. Students' assessments should incorporate linking projects with small firms. Furthermore, lecturers should not only have the necessary knowledge in entrepreneurship but personal experiences should be integrated into the training programme to inspire the students.

The university through its Business Clinic should proactively drive the promotion of entrepreneurial concepts within the university community. The Business Clinic should be more accessible to other faculties' students, and the programme should provide different market knowledge and information. As a unit that incorporates real-life business training with theory, the Business Clinic should establish a venture accelerator programme by providing seed funds, enterprise challenges, and entrepreneurship mentorships that proactively support students' entrepreneurial activity. Combining practical business and incubation support tailored to the specific needs of students can possibly improve entrepreneurial activity and success rates of student-driven enterprises. Future research is recommended to fully evaluate the effectiveness of entrepreneurship education subject components in their impact on students' attitude towards entrepreneurship, perceived entrepreneurial abilities, and entrepreneurial intentions.

## References

- Ajzen, I. (1991). Theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, 50(1), 179-211.
- Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behaviour. *Journal of Applied Social Psychology*, 32(4), 665-683.
- Ajzen, I. (2011). Behavioural interventions: Design and evaluation guided by the theory of planned behavior. In M. M. Mark, S. I. Donaldson, and B. C. Campbell (Eds.), *Social psychology for program and policy evaluation* (pp. 74-100). New York: Guilford.
- Ajzen, I. (2012). The theory of planned behavior. In P. A. M. Lange, A. W. Kruglanski, and E. T. Higgins (Eds.), *Handbook of theories of social psychology* (Vol. 1, pp. 438-459). London, UK: Sage.
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs: Prentice Hall.
- Alberti, F. G., Sciascia, S., & Poli, A. (2005). The domain of entrepreneurship education: Key issues. *International Journal of Entrepreneurship Education*, 2(4), 453-482.
- Alsos, G. A., Isaksen, E. J., & Softing, E. (2006). Youth enterprise experience and business start-up intentions, *Paper presented at the 14th Nordic Conference on Small Business Research*. Stockholm.
- Autio, E., Keeley, R. H., Klofsten, M., Parker, G. G. C., & Hay, M. (2001). Entrepreneurial intent among students in Scandinavia and in the USA. *Enterprise & Innovation Management Studies*, 2(2), 145-161.

- Botswana Vision. (2016). Vision 2016. Retrieved from <http://www.vision2016.co.bw>
- Brijial, P. (2011). Entrepreneurial perceptions and knowledge: A survey of final year university students. *African Journal of Business Management*, 5(3), 818-825.
- Charney, A., & Libecap, G. D. (2000). *The impact of entrepreneurship education: An evaluation the Berger entrepreneurship program at the University of Arizona, 1985-1999*. Missouri: Kauffman Center for Entrepreneurial Leadership.
- Chen, C. C., Greene, P. G., & Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Small Business Venturing*, 13(4), 295-316.
- Cloete, N., Bailey, T., Pillay, P., Bunting, I., & Maassen, P. (2011). Case study: Botswana and University of Botswana. *Universities and Economic Development in Africa*, 1-131.
- Davidsson, P. (1995). Determinants of entrepreneurial intentions. *Working Paper*. Jonkoping: Jonkoping International Business School.
- Engle, R. L., Dimitriadi, N., Gavidia, J. V., Schlaegel, C., Delanoe, S., Alvarado, I., He, X., Buame, S., & Wolff, B. (2010). Entrepreneurial intent: A twelve-country evaluation of Ajzen's model of planned behaviour. *International Journal of Entrepreneurial Behaviour & Research*, 16(1), 35-57.
- Field, A. (2009). *Discovering statistics using SPSS* (3rd ed.). London: Sage.
- Forbes, D. 2005. The effects of strategic decision making on entrepreneurial self-efficacy. *Entrepreneurship Theory and Practice*, 29(5), 599-626.
- Friijis, C., Paulsson, T., & Karlsson, C. (2002). *Entrepreneurship and economic growth: A critical review of empirical and theoretical research*. Östersund, Sweden: Institutet för tillväxtpolitiska studier.
- Gregory, M. (2011). *The strategic and planning value of institutional research in tracking graduate employment*. British Council and the Association of the Commonwealth Universities.
- Hannan, M., Hazlett S., & Leitch, C. (2004). Entrepreneurship education: How do we measure success? *Working paper*. Belfast: Queen's University.
- Hart, D. M. (2003). Entrepreneurship policy: What it is and where it came from. In D. M. Hart (Ed.), *The emergence of entrepreneurship policy: Governance, start-ups and growth in the US knowledge economy*. Cambridge: Cambridge University Press.
- Hynes, B., & Richardson, I. (2007). Entrepreneurship education. A mechanism for engaging and exchanging with the small business sector. *Education and Training*, 49(8/9), 732-744.
- International Labour Organization. (2011). Global employment trends for youth (2011 update). *Geneva: International Labour Office* [Electronic version]. Retrieved from [www.ilo.org/publns](http://www.ilo.org/publns)
- Kolvereid, L. (1996). Prediction of employment status choice intentions. *Entrepreneurship: Theory and Practice*, 21(1), 47-57.
- Kolvereid, L., & Isaksen, E. (2006). New business start-up and subsequent entry into self-employment. *Journal of Business Venturing*, 21(6), 866-885.
- Krueger, N., & Carsrud, A. (1993). Entrepreneurial intentions: Applying the theory of planned behaviour. *Entrepreneurship and Regional Development*, 5, 315-330.
- Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15, 411-432.
- Kuratko, D. F. (2003). Entrepreneurship education: Emerging trends and challenges for the 21st century. *Coleman Foundation White Papers Series for the U.S. Association of Small Business and Entrepreneurship* [Electronic version]. Retrieved from <http://www.usasbe.org/pdf/CWP-2003-kuratko.pdf>
- Lekoko, M. (2011). Students' perceptions regarding entrepreneurship education: A case of Two Universities in Botswana. MTech dissertation, Pretoria, Tshwane University of Technology.
- Liñán, F., & Chen, Y. W. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 33(3), 593-617.
- Liñán, F., Rodrigues-Cohard J. C., & Rueda-Cantuche, J. M. (2010). Factors affecting entrepreneurial intention levels: A role for education. *International Entrepreneurship and Management Journal*, 7(2), 195-218.
- 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.
- Mafela, L. (2009). Entrepreneurship education and community outreach at the University of Botswana. *Eastern Arica Social Science Research Review*, 25(2), 31-52.

- Movahedi, R., & Fathi, H. (2011). Assessing agricultural students' attitude towards entrepreneurship. *International Journal of Agriculture: Research and Review*, 1(4), 168-173.
- Refaat, A. A. (2009). The necessity of engineering entrepreneurship education for developing economies. *International Journal of Education and Information Technologies*, 2(3), 85-96.
- Schoof, U. (2006). Stimulating youth entrepreneurship: Barriers and incentives to enterprise start-ups by young people. *SEED Working Paper*, 76. Geneva: International Labour Office.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *The Academy of Management Review*, 25(1), 217-226.
- Shapero, A., & Sokol, L. (1982). Social dimensions of entrepreneurship. In C. Kent, D. Sexton, and K. Vespers (Eds.), *The encyclopedia of entrepreneurship*. Englewood Cliffs: Prentice-Hall.
- 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, 566-591.
- Statistics Botswana. (2011). Botswana Core Welfare Indicators (Poverty) Survey 2009/10. Central Statistics Office. Retrieved from <http://www.cso.gov.bw>
- Swann, W., Chang-Schneider, C., & Larsen Mccarty, K. (2007). Do people's self-views matter? Self-concept and self-esteem in everyday life. *American Psychologist*, 62(2), 84-94.
- Takachev, A., & Kolvereid, L. (1999). Self-employment intentions among Russian students. *Entrepreneurship and Regional Development*, 11(3), 269-280.
- University of Botswana. (2008). *A strategy for excellence: The University of Botswana strategic plan to 2016 and beyond*. Gaborone: University of Botswana Council.
- Zhao, H., Hills, G. E., & Seibert, S. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, 90(6), 1265-1272.