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Full Length Research Paper

# The influence of the college environment on the development of entrepreneurial intentions

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This study aimed to assess the factors that influence the formation of entrepreneurial intentions (EIs) among college students in Zambia. The research was built on the theory of planned behaviour (TPB) by Ajzne, to identify how the constructs of the same theory are manipulated by the factors that influence entrepreneurship intention formation among college students at Northern Technical College and Kabwe Institute of Technology. Primary data were obtained from 300 students through a self-administered questionnaire and was analysed using structural equation modelling. The study findings reported a positive relationship between the independent variables in the name of risk-taking (RST), college environment (CE) and entrepreneurship education (EE) and (EIs). Attitude towards entrepreneurship (ATE) was observed to mediate the relationship between RST and EIs while subjective norms (SN) were observed to mediate the relationship between RST and EIs. Perceived behavioural control (PBC) was reported to mediate the interaction between all three independent variables and EIs. The results presented both theoretical and practical implications and recommendations were made to policymakers and suggestions for future research.

Key words: Entrepreneurial intention, risk-taking, college environment, entrepreneurship education.

#### INTRODUCTION

Given the growing interest among government in the role entrepreneurship play in achieving socio-economic development objectives, the development of policies aimed to promote entrepreneurship in developing countries has received a lot of attention (Karimi et al., 2017). Many countries are considering entrepreneurship as a panacea for employment creation, technology transfer, infrastructure development and economic growth (Mumba, 2017). To enhance entrepreneurial

activities and promote economic development in Zambia, the government has introduced entrepreneurship subjects in all the programmes offered by Technical education Vocation entrepreneurship and Technology (TEVET) institutions (Kazonga, 2019). Since College schooling is not regarded to be a passageway to acquire formal jobs for graduates hence the prerequisite to contemplate entrepreneurialism and self-employment as a feasible occupation alternative (Ajike et. al, 2015).

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Although, it is generally accepted that College education increase graduate employability, in Zambia the situation is different. About 72% of the youths are not employed (Mwiya et al., 2017).

Literature has shown that the development of pre-requisite entrepreneurial intentions is а entrepreneurial behaviour, especially among students (Bagheri and Pihie, 2015). Therefore, establishing the factors that influence the formation of entrepreneurial intention has received a lot of attention among scholars (Tung et al., 2020). According to Yıldırım et al. (2016), "these factors are categorized as internal (personality) and external (contextual or environment); personal history, social context, attitudes toward entrepreneurship. planned behaviour and personality traits are pointed out as factors that have impact on the propensity to engage in entrepreneurship". In exploring the formation of students' entrepreneurial intentions, two significant issues have been raised. Firstly, it has been observed that studies establishing the formation of entrepreneurial intention have focused on personality and environmental factors (Luthje and Franke, 2003; Nabi and Linan, 2013). Yıldırım et al. (2016) proposed the need for future research to explore further the impact of personality, environment/education on entrepreneurial intentions in one study. Secondly, these studies have been conducted in developing countries or innovativedriven economies. Hence the need to conduct this studies in a developing country, Zambia in particular by combining these factors.

Therefore, the main aim of this study is to replicate the western models in a developing country context to establish whether these factors have the same influence on the development of entrepreneurial intentions among students in Zambia and those in developed countries and hence the rationale for this study.

#### Theoretical framework

#### Entrepreneurship and TPB

Entrepreneurship is regarded as the backbone of economic growth in an economy due to its ability to exploit opportunities in the market and change its structure (Wilfred, 2015). Its consists of three key elements namely; the creation or expansion of business; risk-taking or acceptance of failure and identification and exploitation of new opportunities to produce new products or processes/markets (Muhumed, 2021). European Commission (2012) states that the basis for the establishment of an activity socially or commercially for entrepreneurship. entrepreneurs is the term. Entrepreneurship is nothing but the process of creating new things valuably responding in particular to available opportunities; hence involves time, effort and risk assumption with the expectation of rewards in the end which can take monetary or non-monetary form (Pahuja and Sanjeev, 2016). Entrepreneurship is considered to be a combination of Entrepreneur and Enterprise (Badhai, 2005). As a way to understand entrepreneurship in full, there should be clear definitions of who an entrepreneur is and what an enterprise is. A definition by Gedik et al. (2015) of an entrepreneur is that the term refers to "someone who manages organizes and presumes the risks of an enterprise or a business"; creates or develops something that no one has thought about it before. In this case, El is considered to be the basis for establishing a new business venture in the long run (Karimi et al., 2017).

According to Chinonye et al. (2016), El is defined as, the willingness of an individual to express entrepreneurial behaviour or engages in entrepreneurial activities associated with self-employment initiatives or new business start-ups.

Krueger (1993) states that, EI is the dedication to carry out a certain action necessary to physically start a business venture. On the other hand, Bird (1988), El is an alert disposition focusing on individual experience, attentiveness. and conduct about entrepreneurial behaviours. Els of individuals are known to predict entrepreneurial behaviours although there is no identical definition of Els despite many studies having been conducted (Peng et al., 2012; Ohanu and Ogbuanya (2018) state that the intention for entrepreneurship is a result of one's attitudes and values; that is the motivation or desire to set up and manage a business venture also known as an enterprise. Mwiya et al. (2017) state that intention in itself is a demonstration of how much more someone is eager to strive and how much of an endeavour he or she is prepared to employ, to carry out intended actions.

To understand the formation of Els and how they translate into entrepreneurial behaviour, most of the studies have employed the TPB (Karimi et al, 2017; Mustafa et al., 2016; Alok et al., 2017; Laguía et al., 2019; Zovko et al. (2020). The TPB by Ajzen (1991) has been extensively applied in Els studies in the last decade (Ebewo et. al, 2017). The model explains the link between human belief and human behaviour in an attempt to undertake a certain course of action using three antecedents of Els as follows:

- a. Attitudes towards Entrepreneurship (ATE)- refers to the degree of conduct subject to a person's evaluation or assessment that is either favourable or unfavourable concerning the behaviour in question (Saraih et al., 2018).
- **b. Social Norm (SN)** is said to be one's perception of the pressure exerted by society to either carry out or not particular behaviours such as influence by parents, role models, and peers among others (Zovko et al., 2020).
- **c.** Perceived Behavioural Control (PBC)- this is one's viewpoint of easiness or difficulties in undertaking certain

actions. This may be one's subjective behaviour such as personal assessment of whether one can do it or not reflecting on experience or anticipated obstacles and failures (Pejic et al., 2018)

A study conducted by Shah and Soomro (2017) reported a positive interaction between the two antecedents of Els (ATE and SN) and Els and PBC was not statistically significant. Other studies have indicated a positive relationship between three antecedents of EIs (ATE, SN and PBC) and Els (Fantave, 2019; Kwarbai et al., 2016; Zovko et al., 2020). A survey by Wambua et al. (2020) carried out in Kenya on graduating students of business studies underscores the influence of ATE as a mediating variable in the creation of entrepreneurship intentions amongst students. Karla et al. (2017) state that PBC in line with intention was seen to be strengthened by entrepreneurial education (EE) while the university environment through ATE affected the intentionality to be entrepreneurial through attitude towards entrepreneurship. Based on the above discussion, we tested the following hypotheses

H1a: ATE as an antecedent of Els mediate the relationship between EE and El

H1b: ATE as an antecedent of Els mediate the relationship between EC and El

H1c: ATE as an antecedent of Els mediate the relationship between RST and El

H2a: SN as an antecedent of Els mediate the relationship between EE and El

H2b: SN as an antecedent of Els mediate the relationship between CE and El

H2c: SN as an antecedent of Els mediate the relationship between RST and El

H3a: PBC as an antecedent of Els mediate the relationship between EE and Els

H3b: PBC as an antecedent of Els mediate the relationship between CE and Els

H3c: PBC as an antecedent of Els mediate the relationship between RSTand Els

#### **EE and Els**

EE is considered to be one of the factors that influence the development of EI, especially among students. However, Kurniawan et al. (2021) suggested that EE only is not sufficient because life in itself is education although it is pervasive. They then conclude that formal, informal, and non-formal education can lead any entrepreneurialism decision. According to Maresch et al. (2016) EE increases Els. Along the same established and Kisolo (2016)additionally, that knowledge/education entrepreneurial of the undergraduate using a sample of 100 students significantly affected their intent. Israr and Saleem (2018) a study conducted in Italy showed that EE showed

positive results towards intention. It can be seen that EE affects the intentions of would-be entrepreneurs moderately as presented by Keat et al. (2011). Kwarbai et al. (2016), presented results in which students accessing EE had a high likelihood of forming enterprises as opposed to those that did not partake. Among all the various elements favourable towards the initiative to be entrepreneurial, education is distinctive since it becomes a part of cognitive as well as socio-cultural approaches (Peris-Ortiz et al, 2016). As indicated by Zovko et al. (2020), EE plays a noticeable role in students' awareness of their ability to lead entrepreneurial activity and their weaknesses in management which need to be improved. However, contradictory results were found in a study conducted by Mohammed (2020) that found an insignificant relationship between EE and Els. Therefore, acquired students who have knowledge entrepreneurship education are more likely to engage in entrepreneurial activities. Thus the hypothesis was formulated as follows and tested:

H4: EE as an environmental variable has a positive relationship with EIs

#### RST and Els

RST as a personality factor has a significant influence on the formation of Els (Antoncic, 2000). For a long time, researchers in the field of entrepreneurship have reinforced the idea that establishing an enterprise is a risky behaviour, trying to prove that willingness to take risks or risk appetite is a personal feature that distinguishes between entrepreneurs and non-entrepreneurs; the former can bear risks independently as there is no fear of the obstacles hence, he/she is careful of everything and takes the necessary measures to deal with sudden cases (Omar et al., 2018).

The propensity to take on risks is said to be an ability to take or avoid risks; hence entrepreneurship in the same vein has always been likened to RST (Ozaralli and Nancy, 2016). The ability to take risks was regarded as having a linear relationship with intentions to be enterprising according to Moraes et al. (2018). Attitude toward RST was seen to affect intentions to be enterprising (Moraes et al., 2018). Zovko et al. (2020) concluded that Croatian students with a reduced aversion toward risk had entrepreneurial intentions for a higher degree. A study carried out to ascertain how readiness to bear risk affects the intention to be enterprising learners presented that being a lover of risk positively but moderately affected intentions hence the conclusion that willingness to be a risk-taker is one distinctive factor for features of entrepreneurship (Yurtkoru et al., 2014). A study was conducted among 274 Pakistani students (university level) in assessing the impact of the five major personal characteristics intentionality on entrepreneurship with risk aversion as a mediator; there

**Table 1.** Demographic characteristics of respondents.

Variable		Frequency	Percent
Gender	Male	182	60.7
	Female	118	93.9
	Below 20 y	9	3
	20-21 y	30	10
Age	22-23 y	72	24
	24-25 y	42	14
	Above 25 y	147	49
	Electrical	119	39.7
Departments	Mechanical	121	40.3
	Automotive	26	8.7
	Applied Sciences and Business Studies	34	11.3
	Craft Certificate	4	4
01:6:6:	Advanced Certificate	15	15
Qualification	Diploma	81	81

Source Authors

is therefore a considerable relationship between aversion to risk and intentions (Malik et al., 2020). Given the above discussion, the hypothesis was tested which reads:

H5: RST as a personality factor has a positive influence on Els

#### **CE and Els**

Literature has described the CE as a place where individuals interact which at the same time has a great influence on the decision to become entrepreneurs (Barral et al., 2018). Moraes and others (2018) state that the environment is a construct for EI which is influential in that when the assessment of the environment is positive, EI tends to increase.

Moraes et al. (2018) further add by citing CE as a factor that affects the intention to be enterprising to the highest degree; this way, when there is a positive assessment of the CE by the student; intention also increases. A survey by Moraes et al. (2018) was used to probe entrepreneurial and CE traits' effect on the intention to be enterprising using 287 students at the undergraduate level imploring a layout considering the university environment as having a linear relationship with Els. It was discovered that intentionality by learners to engage in enterprising activities was resulting out of the positive effect of the environment of the university in collaboration with some existing information on entrepreneurship studies. A survey of 3037 targeted graduates of business studies in the public higher learning institutions with a sample size of 354 students; analysis was done and it revealed that an insignificant but positive correlation existed between CE and intentions to be enterprising by business-related learners in public institutions (Wambua et al., 2020). With this information, the hypothesis was tested which reads:

H6: CE as an environmental factor has a positive relationship with Els.

#### **METHODS**

#### Sample and data collection

In this study, a sample size of 300 Northern Technical College and Kabwe Institute of Technology students registered in 2018 was used (Schoch, 2020). Simple random sampling was employed to enhance accuracy and easy access to respondents (Saunders et al., 2009; Babbie, 2007). A total of 300 questionnaires were distributed and returned representing a 100% response rate. As suggested by Hair et al. (2010) the responses from the questionnaires were checked for outliers and missing data before the validation process was conducted. Both independent and dependent items on the questionnaire were measured using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The demographic characteristics of the respondents are indicated in Table 1.

#### **RESULTS**

This section presents the findings from the quantitative primary data collected from northern technical and Kabwe institute of technology students. The findings show that 60.7% of the respondents were male and only 39.3% were female. This is attributed to the fact that the College enrolled more males than females and very few

females are willing to take up engineering-related courses. From Table 1 it can be seen that the highest age range of respondents in this research was above 25 years old. This represents 49% of the total respondents sampled followed by 24% which catered for the age range of 22 to 23 years old. The age category from 24 to 25 years followed by those less than 20 years of age took up 14% and 10% respectively.

Of the 300 students surveyed, 40.3% of the respondents were from the Mechanical department, 11.3% from the Applied Sciences and Business Studies while 8.7% were from the automotive department and 39.7% from the Electrical department. This is to say of all the students that are currently pursuing entrepreneurship as a subject, the Mechanical department was more responsive while the Electrical was less responsive.

Lastly, the results show that 35.7% of the respondents were pursuing diploma programs while 47% and 17.3% were pursuing Advanced and Craft certificate programmes respectively.

### **Factor analysis**

To conduct factor analysis, 41 items were used to measure the constructs based on the research model developed to test the hypotheses. Out of 41 items, 4 of them loaded weakly below 0.63 and were excluded from further analysis. The remaining 39 items loaded above 0.63 which indicated the suitability of the measuring instrument (Table 2). Tabachnick and Fidell (2007) recommended factor loadings of 0.63 and above as being very good.

## Structural equation modelling

Before SEM was conducted, confirmatory factors analysis was performed to establish the reliability and construct validity of the measurement model (Hair et al., 2010). The proposed model reported an absolute fit (Ahmed and Ward, 2016) of the data (X² = 511.221; RMSEA= 0.091; CFI=0.985; TLI=0.910). All 7 constructs reported factor loadings above 0.5 which is fair (Tabachnick and Fidell, 2007) and confirmed the discriminant validity of the constructs. Reliability was achieved using the inter-consistency analysis as shown in Table 2. All the nine constructed reported Cronbach alpha values were above 0.5. Additionally, the CR values for all the constructs were greater than 0.5. According to Tabachnick and Fidell (2007), where the AVE values are too strict, the CR values can be used to determine reliability.

To establish the best fit for the data, direct paths were added from RST, CE and EE to EI and from ATE to PBC and vice versa. Only the path from RST to EI and the covariance (ATE and PBC) were significant (P<0.05).

Therefore, the revised model (Figure 1) reported the best fit for the data and was tested.

Table 3 shows the SEM results indicating the hypotheses accepted and rejected. The results have reported a positive association between RST and EI (Coef. 5.246; p=0.010). Thus hypothesis H5 is supported. Also, the interaction between CE and EI was statistically significant (Coef. 0.1717; p= 0.000). Hypothesis H6 is accepted as well. Additionally, EE reported a significant relationship with EI (Coef. 04882; p= 0.000). Based on these results hypothesis H4 is accepted.

# **Testing for mediation**

From Table 3, it can be seen that ATE has a significant relationship with EI (Coef. 0.1611; p= 0.000), but its association with CE was not statistically significant (Coef. 0.0528; p=0.151). Therefore, ATE was not found to mediate the relationship between CE and EI. Thus, H1b was not supported. However, ATE reported positive associations with RST (Coef. 0.4774; p=0.000) and hypothesis H1a was not supported. Furthermore, its association with EE (Coef, -0.0108; p=0.778) was not statistically significant and hypothesis H1c was also rejected.

The relationship between SN and the two independent variables yielded non-significant results. SN had a negative relationship with EE (Coef. -0.0476; p=0.068) and CE (Coef. -0.0277; p=0.268). Its relationship with RST was statistically significant (Coef. -8.4234; p=0.000). Additionally, its relationship with EI was significant (Coef. 0.6134; p= 0.000). Thus SN mediates the relationship between the independent variable RST and EI. Based on the above discussion, hypothesis H2c was accepted

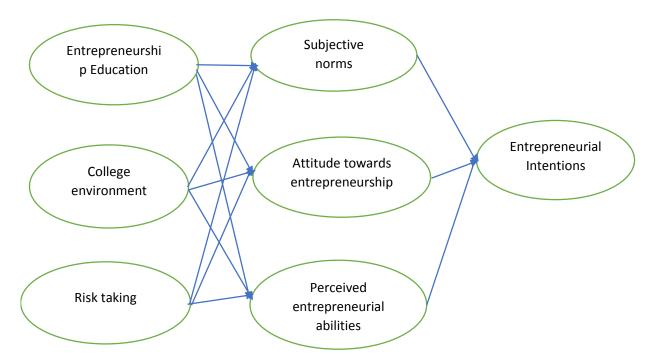
PBC was found to be positively related to all the independent variables; CE (Coef. 0.2663; p=0.000), EE (Coef. 0.2663; p=0.000) and RST (Coef. 0.7279; p=0.000). The interaction between PBC and EI was also significant (Coef. -0.1622; p=0.000). The findings indicate that PBC mediates the relationship between the independent variables and EI. Therefore hypotheses H3a, H3b and H3c were supported.

#### DISCUSSION

In this study, the personality factors (RST) and environmental factors (CE and EE) were added to the TPB and examined to determine their influence on the Els of College students in the Zambian context. The analysis in Table 3 revealed a significant association between the RST and Els. The results are in agreement with the findings from previous studies which reported a positive interaction between RST and Els (Ozaralli and Nancy, 2016; Antoncic, 2000; Omar et al., 2018; Moraes et al., 2018). Increasing students' ability to take up risks

Table 2. Factor Loadings and Composity Reliabilities.

Latent variable	Iten	Factor loading	CR	Cronbα
	<b>BI</b> : Starting my own business would offer great satisfaction to me than being employed given all resources.	0. 902	0.909	0.755
	<b>B2</b> : Being an entrepreneur presents more advantages than disadvantages to me	0. 682		
٨ΤΕ	B3: I can spot good business opportunities long before others can	0. 780		
ATE	<b>B4:</b> I am confident It would be easy for me to start my own business and be successful	0. 784		
	B5: Nothing is more exciting than seeing my ideas turn into reality	0. 761		
	<b>B6</b> : Entrepreneurship is one of my favourite subjects	0. 824		
	C2: In my college, there are lots of students pursuing their ideas for business	0775	0.897	0.806
	<b>C3:</b> The entrepreneurship content taught at my college is good enough to equip students with the skills to start and manage a business.	0. 657		
	C4: Entrepreneurship cannot be taught	0700		
	C5: I am prepared to start a viable firm after learning about entrepreneurship	0. 668		
PBC	<b>C6:</b> In my college, there is a well-functioning support infrastructure to support the start-up of new firms	0. 700		
	C7: I know many people in my college who have successfully started up their businesses after graduation	0. 779		
	C8: I know the necessary practical details to start a business	0. 779		
	C10: If I tried to start a firm, I would have a high probability of succeeding	0. 722		
	D1: If I became an entrepreneur, my family would consider it to be	0. 853	0.908	0.844
SN	D2: If I became an entrepreneur, my close friends would consider it to be	0. 915		
	D3: Overall I consider entrepreneurship a career	0. 861		
	E1:I will take risks and make efforts to start and run my firm	0. 839	0.913	0.818
EI	E2: My professional goal is to become an entrepreneur	0. 799		
	E3: I have a strong intention to start a business someday	0. 916		
	E4: I am determined to create a business in the future	0. 849		
	F1: The college environment helps me to identify business opportunities	0. 768	0.891	0.849
	F2: The college environment motivates me to want to open my own business	0. 719		
	F3: The college environment develops my leadership skills through group work	0. 899		
CE	F4: The college environment enhances my creativity and ability to innovate	0. 672		
	<b>F5:</b> The college environment provides me with planning and strategy tasks in different disciplines, developing my ability to plan	0. 817		
	<b>F6</b> : The college environment has enabled me to relate to and analyze the variables that influence the result of a problem, increasing my ability to take calculated risks.	0. 675		
	<b>G1</b> : I would assume a long-term debt, believing in the advantages that a business opportunity would bring me	0.702	0.867	0.763
	<b>G2</b> : I admit to taking risks in exchange for possible benefits.	0.799		
RST	G3: My decisions are not predominantly based on my comfort zone	0.829		
	<b>G4</b> : I believe that getting involved in situations of higher risk will create results of great impact.	0.816		
EE	H1: Knowledge about the entrepreneurial environment	0. 792	0.918	0.889
- <del>-</del>	H2: Greater recognition of the entrepreneur's figure	0. 817	2.0.0	
	H3: The inclination to be an entrepreneur	0. 864		
	H4:The necessary abilities to be an entrepreneur	0. 873		
	H5: The intention to be an entrepreneur	0. 817		



**Figure 1.** Conceptual model. Source Authors

Table 3. Structural equation model: Revised conceptual model.

		Ceof.	P>[z]
	RST	5.246	0.010
	CF	0.1717	0.000
	FF	0.4882	0.000
Structural EI <-	ATE	0.1611	0.000
	SN	0.6134	0.000
	PBC	-0.1622	0.000
	RST	0.4774	0.000
ATE <-	CE	0.0528	0.151
	EE	-0.0108	0.778
	RST	-8.4234	0.000
SN <-	CE	0.0277	0.268
	EE	-0.0476	0.068
	RST	0.7379	0.000
PBC <-	CE	0.2868	0.000
	EE	0.2663	0.000

Source: Authors

enhances their chances and abilities to identify and exploit new business opportunities and engage in entrepreneurial behaviour. Yurtkoru et al. (2014) suggested that risk-taking is one of the characteristics of

an entrepreneur. Therefore, enhancing the risk-taking abilities of College students will stimulate their formation of Els and prepare them to create new business ventures.

Most studies have reported a positive relationship between EE and EIs (Maresch et al., 2016; Israr and Saleem, 2018; Kurniawan et al., 2021; Kwarbai et al., 2016). The results of this study are in agreement with the prior studies on entrepreneurial intentions. relationship between EE and EI was statistically significant in Zambia. This can be attributed to the similarities in the design and offering of EE in developing countries like Zambia and developed nations. It was observed that students who are equipped with entrepreneurial knowledge and skills are more likely to undertake entrepreneurial activities (Zovko et al., 2020). Therefore, when the EE is properly designed and offered to students, their ability to recognise and exploit opportunities is enhanced and they can engage themselves in entrepreneurship behaviours. However, contrary results were reported in a study conducted by Mohammed (2020) who reported an insignificant relationship between EE and Els.

Another positive association was observed between CE and Els like in previous studies (Barral et al., 2018; Moraes et al., 2018). On the other hand, a study conducted by Wambua et al. (2020) reported a non-significant relationship between CE and El. The explanation for this is that the assessment of the College environment differs between students in developed

economies and those in developing economies like Zambia. When students have a positive assessment of the College environment and other support services being offered, their formation of EI is stimulated (Moraes et al., 2018).

Several prior studies reported positive interaction between the three antecedents of entrepreneurial intentions (ATE, SN and PBC) and Els (Linan and Chen, 2009; Nabi and Linan, 2013; Fantaye, 2019; Kwarbai et al., 2016; Zovko et al., 2020) this study was not exceptional. All three antecedents of entrepreneurial intentions (ATE, PBC and SN) reported significant interactions with Els. With regards to independent variables, RST was reported to be positively related to ATE while EE and CE were not. This was an indication that ATE mediates the relationship between RST and Els. A recent study conducted by Wambua et al. (2020) on students in Kanya found ATE to be a mediator in the formation of Els. Similarly, Karla et al (2017) reported a significant association between ATE and Els. Thus increasing students' ATE through enhanced RST could positively influence the formation of Els among students. On the other hand, CE and EE were not found to be positively related to SN except for RST suggesting that RST mediates the relationship between RST and Els.

On PBC, all three independent variables reported positive interactions highlighting the mediating effects of PBC on the relationship between EE, CE and RST and Els. From the findings, it can be seen that improving EE, CE and RST strengthens students' PBC which could influence positively the formation of Els.

# Conclusion

This research aimed to investigate the influence of personality and environmental factors on the formation of students' entrepreneurial intentions in Zambia. The study has reported positive interactions between the independent variables (EE, CE and RST) and Els. Also, the mediation effects of PBC on the relationship between three independent variables and El have been established. Furthermore, the antecedents of entrepreneurial intentions ATE and SN have been observed both to mediate the relationship between RST and Els while the other mediations on EE and CE failed.

The study results provide both theoretical and practical implications. Theoretically, the study has highlighted the significance of personality and environmental factors in the formation of entrepreneurial intentions of College students.

The study has demonstrated that environmental factors and personality factors studied in isolation to university students can be combined to College students to explain the formation of Els. From the practical perspective, the study has identified the environmental factors that enhance the formation of entrepreneurial intentions. Improving CE in terms of infrastructure and material

resources, strengthening entrepreneurship education and enhancing students' RST ability could positively increase their ATE, PBC and SN and influence the formation of intentions. Therefore educators should provide the necessary infrastructure required for experiential learning to increase students' abilities and competencies needed for venture creation.

While some of the independent variables and antecedents of EI have not reported positive results. Additional research is needed to be conducted in different developing countries, incorporate more personality and contextual variables and operationalised them differently (Karimi et al, 2017). Furthermore, there needs to be studied further on the CE by focusing more on the impact close family and friends influence on students' EIs employing the mixed method of data collection which is one of the limitations of this study. Additionally, future research can also compare the formation of EI between students from private and public Colleges.

The theory of planned behaviour proves to be a tool that directly influences intention at the effect of other factors contextual or inherent. The research findings recommend that the study of Entrepreneurship is split into two to be offered in the first year of study as well as the final year to create an entrepreneurial environment conducive to business establishment and growth. An entrepreneurship centre is also recommended to be established that will have a database of graduates that become entrepreneurs for easy links and connections between students and graduates as well as other successful entrepreneurs.

#### **CONFLICT OF INTERESTS**

The authors have not declared any conflict of interests.

# REFERENCES

Ahmed E, Ward R (2016). Analysis of factors influencing acceptance of personal, academic and professional development e-portfolios. Computers in Human Behavior 63:152-161.

Ajike D, Kelechi NG, Hamed A, Onyia V, Kwarbai JD (2015). Entrepreneurship education and entrepreneurial intentions: The role of theory of planned behaviour. International Journal of Advanced Research in Social Engineering and Development Strategies 3(1):1-10.

Ajzen I (1991). The theory of planned behaviour. Organizational Behaviour and Human Decision Processes 50(2):179-211.

Alok S, Kocherlakota N, Beernelly S (2017). 'Gender and Entrepreneurial Intentions: A Study Among BITS-Pilani Students. IUP Journal of Entrepreneurship Development 14(4):7-24.

Antoncic B (2000). Intrapreneurship: Construct refinement and an integrative model development. Case Western Reserve University.

Babbie E (2007). The practice of social research. Thomson Learning Academic Center. USA.

Badhai B (2005). Entrepreneurship for Engineers. 5th ed. Gagan Kapur. New Delhi.

Bagheri A, Pihie ZA (2015). Factors influencing students' entrepreneurial intentions: The critical roles of personal attraction and perceived control over behavior. The International Journal of Management Science and Information Technology 16:16-28.

- Barral MRM, Ribeiro FG, Canever MD (2018). Influence of the university environment in the entrepreneurial intention in public and private universities. RAUSP Management Journal 53:122-133.
- Bird B (1988). Implementing entrepreneurial ideas: The case for intention. Academy of Management Review 13(3):442-453.
- Chinonye LM, Maxwell A, Musanmula A, Mayowa A, Inelo F (2016). Entrepreneurship education and entrepreneurial intentions: The moderating role of passion. The Social Sciences 11(5):645-653.
- Ebewo PE, Shambare R, Rugimbana R (2017). Entrepreneurial intentions of Tshwane University of technology, arts and design students. African Journal of Business Management 11(9):175-182.
- European Commission (EC) (2008). Needs and Constraints; Analysis of the Three Dimensions of Third Mission Activities. Available at: http://www.E3mproject.Eu/Docs/Three-Dim-Third-Mission-Act.Pdf
- Fantaye MD (2019). Factors Affecting Entrepreneurial Intention among Graduating Students at Debre Berhan University, Ethiopia. Journal of Investment and Management 1(8):25-31.
- Gedik Ş, Miman M, Kesici MS (2015). Characteristics and attitudes of entrepreneurs towards entrepreneurship. Procedia-Social and Behavioral Sciences 195:1087-1096.
- Hair JF, Black WC, Babin BJ, Anderson RE, Tatham R (2010). Multivariate data analysis (7th edition). Harlow: Pearson Education Limited.
- Israr M, Saleem M (2018). Entrepreneurial Intentions Among University Students In Italy. Journal of Global Entrepreneurship Research 1(8):1-14.
- Karimi S, Biemans JAH, Mahdel NK, Lens T, Chizari M, Mulder M (2017). Testing the relationship between personality characteristics, contextual factors and entrepreneurial intentions in a developing country. International Journal of Psychology 52(3):227-240.
- Karla S, Guillermo H, Paulina G, Julián G (2017). Prior exposure and educational environment towards entrepreneurial intention. Journal of Technology Management and Innovation 12(2):45-58.
- Kazonga E (2019). Implications of Policy and Legal Frameworks on Higher Education in Zambia- Excellence in Higher Education 8:8-13.
- Keat OY, Selvarajah C, Meyer D (2011). Inclination towards entrepreneurship among university students: An empirical study of Malaysian university students. International Journal of Business and Social Science 2(4):1-10.
- Kisolo M (2016). Factors determining entrepreneurial intentions among university students in Kenya: A case of USIU-Africa. Available at: http://Erepo.Usiu.Ac.Ke/11732/2643
- Krueger N (1993). The impact of prior entrepreneurial exposure on perceptions of new venture feasibility and desirability. Entrepreneurship Theory and Practice 18(1):5-21.
- Kurniawan M, Yudoko G, Basri M, Umbara A (2021). Do entrepreneurship students have an intention to become an entrepreneur?

  Available at:
- http://www.Abacademies.Org./Articles/Do-Entrepreneurship-Students-Have-An-Intention-To-Become-An-Entrepreneur-7969.Html
- Kwarbai J, Ajike E, Nnorom G, Akinlabi B, Valerie A (2016). Entrepreneurship education and entrepreneurial intentions: The role of theory of planned behaviour 1 2. Available At https://www.Academia.Edu/24439094/Entrepreneurship\_Education\_ And\_Entrepreneurial\_Intentions\_The\_Role\_Of\_Theory\_Of\_Planned\_ Behaviour\_1\_2?
- Laguía A, Moriano JA, Gorgievski MJ (2019). A psychosocial study of self-perceived creativity and entrepreneurial intentions in a sample of University students. Thinking Skills and Creativity 31:44-57.
- Linan F, Chen Y (2009). Development and cross-cultural application of a specific instrument to measure Entrepreneurial Intentions. Available at:
  - https://www.Academia.Edu/4568820/Development\_And\_Cross\_Cultural\_Application\_Of\_A\_Specific\_Instrument\_dTo\_Measure\_Entrepreneurial\_Intentions
- Luthje C, Franke N (2003). The making of an entrepreneur: Testing a model of entrepreneurial intentions among engineering students at MIT. Research and Development Management 33(2):135-147.
- Malik A, Muhammad A, Khattak S, Muhammad A (2020). Personality Traits and Entrepreneurial Intention: The Mediating Role of Risk Aversion. Available at: https://Doi.Org/10.1002/Pa.2275
- Maresch D, Harms R, Kailer N, Wimmer-Wurm B (2016). The Impact

- of Entrepreneurship Education on the Entrepreneurial Intention of Students in Science and Engineering versus Business Studies University Programs. Technological Forecasting and Social Change 104:172-179.
- Mohammed W (2020). Factors affecting entrepreneurial intention among graduating students at Mizan Tepi University. Ethiopia Journal of Economics and Economic Education Research 21(5):1-12.
- Moraes GH, lizuka ES, Pedro M (2018). Effects of entrepreneurial characteristics and university environment on entrepreneurial intention. Revista de Administração Contemporânea 22:226-248.
- Muhumed A (2021). Entrepreneurship: What Is Entrepreneurship?
  Available at:
  https://www.Academia.Edu/25526008/ENTREPRENEURSHIP\_What
  \_Is\_Entrepreneurship
- Mumba E (2017). Causes of Failure of Entrepreneurship in Zambia. The International Journal of Multi-Disciplinary Research 2017:1-22.
- Mustafa MJ, Hernandez E, Mahon C, Chee LK (2016). Entrepreneurial intentions of university students in an emerging economy. The influence of university support and entrepreneurial intention. Available At: https://doi.org/10.1108/JEEE-10-2015-0058
- Mwiya B, Yong W, Shikaputo C, Kaulung'ombe B, Kayekesi M (2017). Predicting the Entrepreneurial Intentions of University Students: Applying the Theory Of Planned Behaviour in Zambia, Africa. Open Journal of Business and Management 5:592-610.
- Nabi G, Linan F (2013). Considering business start-ups in recession: The role of risk perception and economic context in shaping entrepreneurial intentions. International Journal of Entrepreneurial Behaviour and Research 19(6):633-655.
- Ohanu IB, Ogbuanya TC (2018). Determinant factors of entrepreneurship intentions of electronic technology education students in Nigerian universities. Journal of Global Entrepreneurship Research 8(1):1-17.
- Omar BD, Benachenhou SM, Arzi F (2018). The role of individual factors as a predictor of entrepreneurial intention: Case of female university students. Management Review 8(1):28-34.
- Ozaralli N, Nancy R (2016). Entrepreneurial intention: antecedents to entrepreneurial behavior in the USA and Turkey. Journal of Global Entrepreneurship Research 6(1):1-32.
- Pahuja A, Sanjeev R (2015). Introduction to Entrepreneurship. Available at: https://Ssrn.Com/Abstract=2761878
- Pejic B, Mirjana A, Merkac S (2018). Examining determinants of entrepreneurial intentions in Slovenia: Applying the theory of planned behaviour and an innovative cognitive style. Economic Research-Ekonomska Istraživanja 31(1):1453-1471.
- Peng Z, Lu G, Kang H (2012). Entrepreneurial intentions and its influencing factors: A survey of the university students in Xi'an China. Creative Education 3(8):95-100.
- Peris-Ortiz M, Álvarez-García J, Rueda-Armengot C (2016). Entrepreneurial intentions and entrepreneurship education to University students in Portugal. Technology, Innovation and Education 2(1):1-11.
- Saraih U, Zuraini A, Mutalib S A, Tunku S, Harith A (2018). Examining the relationships between attitude towards behaviour, subjective norms and entrepreneurial intention among engineering students. In MATEC Web of Conferences P 05011.
- Saunders M, Lewis P, Thornhill A (2009). Research methods for business students. 6th ed. Essex: Pearson Education Limited
- Schoch K (2020). Case study research. Research design and methods: An applied guide for the scholar-practitioner pp. 245-258.
- Shah N, Soomro BA (2017). Investigating entrepreneurial intention among public sector university students of Pakistan. Education+ Training 59(7/8):841-855.
- Tabachnick B, Fidell L (2007). Using multivariate statistics. New York.
- Tung DT, Hung NT, Phuong NTC, Loan N TT, Chong SC (2020). Enterprise development from students: The case of universities in Vietnam and the Philippines. The International Journal of Management Education 18(1):100333.
- Wambua B, Gichunge E, Mwiti E (2020). University Learning Environment and Entrepreneurship Intentions among Business Students in Public Universities in Kenya. IOSR Journal of Business and Management (IOSR-JBM) 22(4):53-60.
- Wilfred I A (2015). The spirit of entrepreneurial education in Namibia:

- An exploratory study. Available At: https://www.Intechopen.Com/Books/Entrepreneurship-Education-And-Training/The-Spirit-Of-Entrepreneurial-Education-In-Namibia-An-Exploratory-Study
- Yıldırım N, Çakır Ö, Aşkun OB (2016). Ready to dare? A case study on the entrepreneurial intentions of business and engineering students in Turkey. Procedia-Social and Behavioral Sciences 229:277-288.
- Yurtkorua ÉS, Pınar A, Begüm ST (2014). Willingness to take risk and entrepreneurial intention of university students: An empirical study comparing private and state Universities. Available At: www.Sciencedirect.Com
- Zovko L, Želimir D, Ivana B (2020). Determinants of students' entrepreneurial intention: An Empirical Research. Available At: https://Doi.Org/10.30924/Mjcmi.25.1.2 005.342-057.875