

The Determinants of Entrepreneurial Intentions among Commerce Postgraduate Students in Zimbabwe

*Munyaradzi Mutsikiwa¹ and Evelyn Madziba²

^{1,2} Great Zimbabwe University

¹mmutsikiwa@gzu.ac.zw, ²emadziba@gzu.ac.zw

*Corresponding author

Abstract

The main purpose of this study was to examine the effect of personal attitude, perceived behavioural control, and subjective norms on the entrepreneurial intentions of commerce postgraduate students in Zimbabwe. The researchers employed a single cross-sectional survey to collect data from respondents. The research included 180 postgraduate students. To test the traced hypotheses the data were examined using structural equation modelling. The results revealed that personal attitude and perceived behavioural control had significant positive relationships with entrepreneurial intentions whereas subjective norms did not have any significant relationship with entrepreneurial intentions. The results partially support the applicability of the theory of planned behaviour to entrepreneurship within the socio-economic context of Zimbabwe.

Keywords: *Theory of planned behavior, personal attitude, perceived behavioural control, subjective norms, entrepreneurial intentions.*

1. Introduction

There is a growing consensus regarding the significance of entrepreneurship in fostering the economic transformation of societies. Ebiringa (2013) notes that countries that have experienced high levels of entrepreneurial initiatives can enjoy reduced unemployment rates as well as high standards of living. It is hoped that entrepreneurship remains the answer to unemployment problems and sluggish economic growth (Rambe *et al.*, 2015).

Because of the role that entrepreneurship plays in the growth and development of economies, it has drawn considerable attention from scholars and practitioners (Debarliev *et al.*, 2015). Studies on the determinants of entrepreneurial intentions have proliferated over the years due to the realisation that entrepreneurship constitutes a real source of employment and wealth creation, for individuals and nations (Arrighetti *et al.*, 2016). Even though studies abound elsewhere in the world, and even though Zimbabwe is presently in a state of the desperate need for economic growth (Zindiye *et al.*, 2012), we are still lagging behind the rest of the world in studies that are addressing the entrepreneurial intention of Zimbabweans. Examples of such studies include Rambe *et al.* (2015) and Mauchi, *et al.* (2011). The majority of the studies dwelt on the informal sector and others on the proliferation of Small to Medium Enterprises (SMEs) that are largely engaged in art and craft, carpentry work, metalwork and services such as retailing, education, beauty and health (Majoni, *et al.*, 2016). Amongst these scholars is an overwhelming approbation for the critical role played by SMEs in the economy and how they are confronting, the most pressing challenges facing Zimbabwe today - namely, job creation and poverty alleviation. Therefore, the main aim of this study is to examine the antecedents of entrepreneurial intentions of commerce postgraduate students in Zimbabwean universities.

It is hoped that the study contributes to the extant literature on entrepreneurial intentions. Notably, most studies that have assessed the role of the theory of planned behaviour (TPB) on entrepreneurial intentions have widely been conducted elsewhere in the world, with limited studies having explored the Zimbabwean context. With entrepreneurship being such a critical need for the present time, this study aims to examine the extent to which personal attitude, perceived behavioural control and subjective norms affect the entrepreneurial intentions of commerce students, in a socio-economic context characterized by high levels of unemployment, crumbling business infrastructure and an economy that is on a general free fall. The study is also significant to policymakers, business practitioners and key drivers of the entrepreneurship agenda as it gives them insight into the most dominant determinant factors of entrepreneurial intentions within the context of Zimbabwe. Furthermore, the study also examines whether the TPB is still a relevant theory that could be applied to predict behaviour within diverse contexts of entrepreneurship.

2. Literature review

This section discusses the main constructs of the study.

2.1. Personal Attitude

Attitude towards entrepreneurship has been explained as the way an individual thinks about the entrepreneurial activity (Munir *et al.*, 2019). It is also portrayed as the preferences and choices that an individual has concerning entrepreneurship. Ajzen (1991) described attitudes as the extent to which an individual approves or disapproves of the behaviour in question. According to the TPB, the more a person has a positive attitude towards a given behaviour the more probable that individual may be expected to carry out the behaviour (Ajzen, 1991). This suggests that attitude towards a specific behaviour is commensurate with the degree to which an individual holds a particular view towards the act of commencing a new business (Aragon-Sanchez *et al.*, 2017). To that end, attitude is regarded as one of the main antecedents of entrepreneurial intention (Ajzen, 1991). Empirical research has substantiated that attitude is an important factor that is employed to explain entrepreneurial intention (Paço *et al.*, 2011), such that when an individual has a positive attitude towards starting a business, there is a higher chance of going ahead and start one.

2.2. Perceived behavioural control

The second antecedent of intentions is perceived behavioural control – which refers to a reflection of the easiness or difficulty of performing a particular behaviour, and it is assumed to be a reflection of one's experience as well as the kind of impediments and obstacles that are expected in the process of attempting to undertake that behaviour (Ajzen, 1991). More specifically, TPB suggests that perceived behaviour control mirrors the individual's beliefs about their wherewithal to control the behaviour in question as well as how they perceive the controllability of the behaviour itself (Ajzen, 2002). Thus, in the discourse on the subject of entrepreneurship, it is a reflection of the ease or difficulty of carrying out the necessary behaviours associated with the successful entrepreneurial activity (Cardon and Kirk, 2015). It is also regarded as an accurate reflection of actual behavioural control, such that together with intention, the construct can reliably be used to predict behaviour.

2.3. Subjective Norms

The third antecedent of intention is subjective norms. Subjective norms denote the perceived social pressure that is effected upon an individual to carry out or avoid a particular behaviour. Studies show that they comprise normative beliefs and the motives to conform to the beliefs

(Ajzen and Fishbein, 1980). Normative beliefs consist of the view that key peer members encourage or discourage a chosen behaviour. Thus implying that these significant others largely establish the standard that specifies how the individual should behave. The second component of subjective norms, which is, motivation to comply, refers to whether or not the person is willing to conform to these stipulated norms, hence aligning their behaviour with the expectations of the significant others. It then depends on the nature of the social environment, these pressures may encourage or hinder the development of an individual's entrepreneurial career. An individual's subjective norms have been found to have a strong impact on entrepreneurial intentions (Liñán and Chen, 2009). Thus an individual depends on the approval of close people to undertake entrepreneurial activities (Liñán and Chen, 2009). Thus, there is a strong likelihood that an individual with positive attitudes about starting an entrepreneurial venture, who also perceives social support from key referent others and who has the conviction that he or she will succeed in business may proceed to start one.

2.4. Entrepreneurial intentions

Entrepreneurial intention is conceptualised as an individual's decision to commence a business venture in the future (Van Gelderen *et al.*, 2008). Similarly, Bird (1988) defined entrepreneurial intentions as the state of mind of an individual which steers the individual toward the desire of creating a business venture. Accordingly, entrepreneurial intention can be viewed as the mindset in an individual which drives his or her focus towards engaging in an entrepreneurial venture rather than seeking formal employment. According to literature entrepreneurial intentions is the determination of an individual to execute entrepreneurial behaviour (Liñán and Rodríguez, 2004). Similarly, Krueger *et al.* (2000) reiterated the significance of intentions in starting a business by arguing that the act of starting a business cannot be accomplished on a whim but rather, they highlight the key role played by one's intentions. This points to the predominance of the impact of the entrepreneur's intentions at the birth of the venture. Literature has consistently indicated that the intention to perform a behaviour precedes the actual behaviour (Carsrud and Brannback, 2011). Hence, the intention is confirmed to be an important predictor in the determination of behavioural actions. Arguably, entrepreneurial intention can be confidently linked to the behavioural actions that drive the starting of a business. In this view, entrepreneurial intentions are that state of mind which directs the actions of individuals towards the creation of a new business (Remeikiene and Startiene, 2013). It also means that the stronger the intention of an individual is, the higher the probability of implementing that behaviour in question.

3. Theories of the study

3.1. Theory of Planned Behaviour (TPB)

This study applies the TPB because it has been widely employed to explain entrepreneurial intentions with consistency (Moriani *et al.*, 2012). Compared to other models, scholars have argued that the TPB offers a more comprehensible and versatile model, which facilitates both the understanding as well as forecasting of entrepreneurial intention because it considers both individual and societal factors (Krueger *et al.*, 2000). What further differentiates it from other models and therefore making it more preferable, is its wide application and reliability in predicting a diverse array of behaviours. (Armitage and Conner, 2001).

Ajzen's (1991) TPB has also been consistently used to examine the entrepreneurial intentions of university students (Nguyen, 2017). Ajzen and Cote (2008), further maintain that TPB is considered a useful and effective instrument for human behaviour predictions. The TPB posits that when the behaviour is dependent upon an individual's free will, intentions are

assured predictors of behaviour (Ajzen and Fishbein, 2005). The TPB comprises three key components that predict behavioural intentions. These are the individual's attitude towards the outcome of the behaviour, perceived behavioural control and subjective norms. Empirical studies have frequently provided conflicting results on the influence of the three factors of the TPB for predicting entrepreneurial intentions. Thus, the current study examines the determinants of entrepreneurial intentions of commerce postgraduate students using the TPB. The proposed model for this study is derived from the TPB (Ajzen, 1991) and is depicted in Figure 1.

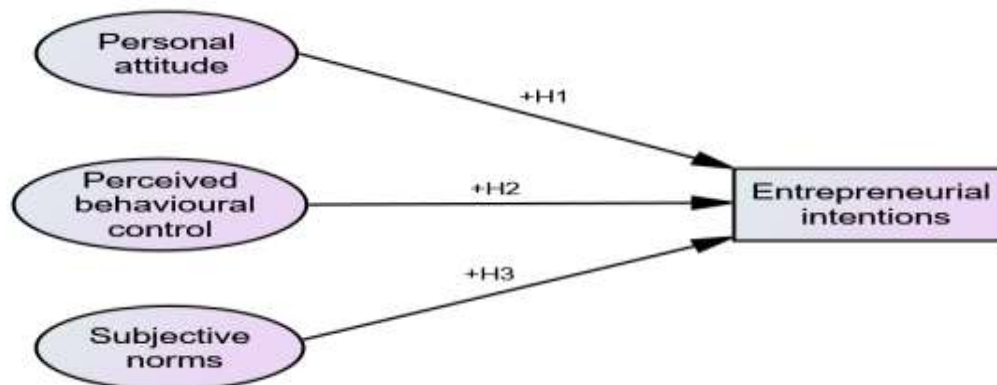


Figure 1. The proposed model

4. Hypotheses of the study

According to the TPB, personal attitudes, perceived behavioural control and subjective norms are the proximal determinants of intentions (Ajzen, 1991). Empirical research has confirmed that these constructs are used to explain entrepreneurial intentions (Bosma and Levie, 2010).

More studies from several scholars (Roy, 2017) have examined the influence of attitude towards entrepreneurship intentions and the results revealed that attitude has a positive relationship with entrepreneurial intention. Confirming the same findings, Wu and Wu (2008) stated that a positive personal attitude towards start-ups provides a good foundation for entrepreneurial behaviour among students. As such, the following hypothesis is proposed:

H₁: Personal attitude has a positive relationship with entrepreneurial intentions.

Several studies have confirmed the positive correlation between perceived behavioural control and entrepreneurial intention (Munir et al., 2019). In a study by Sommer and Haug (2011), results revealed that perceived behavioural control was the most significant determinant of entrepreneurial intention. In another study that was carried out to find out the determinants of entrepreneurial intentions among international students in Turkey, results confirmed the findings by previous researchers (Munir et al., 2019) that perceived behavioural control has a positive correlation with entrepreneurial intentions. Yurtkorua et al. (2014) also undertook a study to determine the antecedents of entrepreneurial intentions on Turkish university students and the findings showed that perceived behavioural control had a significant positive correlation with entrepreneurial intentions. Additionally, the positive effect of perceived behavioural control on intentions has also been confirmed by Moriano et al. (2012). As such, the following hypothesis is proposed:

H₂: Perceived behavioural control has a positive relationship with entrepreneurial intentions.

Previous studies have revealed controversial results concerning the impact that subjective norms have on entrepreneurial intentions (Armitage and Conner, 2001). The role of subjective norms, therefore, lacks clarity especially in the domain of entrepreneurship. For example, studies by Chen and He (2011) and Autio *et al.* (2001) found that subjective norms have an insignificant role in the prediction of entrepreneurial intention. Contrarily, several studies have found that subjective norms are good predictors of intentions (Kautonen *et al.*, 2013). Aloulou (2016) used the TPB to predict the formation of entrepreneurial intentions of the final year Saudi University students and the outcome of the study showed that subjective norms have a statistically significant correlation with entrepreneurial intentions. Other studies that also confirmed significant positive relationships include Aragon-Sanchez *et al.* (2017) and Pejic *et al.* (2018). As such, the following hypothesis is proposed:

H₃: Subjective norms have a positive relationship with behavioural intentions.

5. Methodology

To collect data from respondents, the researchers used the survey method to solicit data from postgraduate students who were in the penultimate and ultimate semesters of their studies and were enrolled in the Schools of Commerce and were doing commerce-related programmes in their respective universities. The data were collected during two weeks ranging from mid-January to the end of January 2020. An offline survey was implemented through research assistants. The sample comprised 180 students (102 males and 78 females). A decision was made to use postgraduate students in this study because of the difficulties graduates encounter in trying to get formal employment. Above all, local universities are encouraged to produce graduates who are equipped with entrepreneurial skills useful to start new business ventures. Researchers also emulate prior studies that employed students to examine the determinants of entrepreneurial (Liñán and Chen, 2009)

A multi-item questionnaire was developed on a five-point interval scale. All the items were adapted from Liñán and Chen (2009). The questionnaire comprised of two sections. The first section consisted of the three antecedents of entrepreneurial intentions and entrepreneurial intentions, whereas the second part consisted of demographic data.

To analyse data, descriptive statistics were used (refer to Table 1 and 2) and structural equation modelling was employed and the results of the analysis are depicted in Figure 1.

6. Results

6.1 Profile of respondents

Table 1 portrays the demographic profiles for this study. From a total of 180 responses, the table depicts that the gender distribution of the sample was slightly uneven with 56.7 per cent males and 43.3 per cent females. Table 1 also depicts that most of the respondents were aged between 30 and 40. Thus, the majority of the respondents were middle-aged men and women. The majority of the respondents had undergraduate degrees (51.1%). In terms of income, most of the respondents earned less than ZimRTGS\$4 999.

Table 1 Demographic profiles of respondents

Demographic characteristics	Demographic sub-characteristics	Frequency (n =180)	Percentage (%)
Gender	Male	102	56.7

	Female	78	43.3
Age	Less than 20 years	3	1.7
	20-30 years	46	25.6
	30 -40 years	93	51.7
	40 -50 years	35	19.4
	+60 years	3	1.7
Education	Certificate	5	2.8
	Diploma	25	13.9
	Undergraduate degree	92	51.1
	Masters	50	27.8
	Doctorate	7	3.9
	Unclassified	1	.6
Income	<RTGS\$4 999	108	60.0
	RTGS\$5 000 - 9 999	38	21.1
	RTGS\$10 000 - 19 999	14	7.8
	> RTGS\$20 000	18	10.0

6.2. Descriptive statistics

Table 2 summarises the means, standard deviations and internal consistencies of the research constructs.

Table 2. Descriptive statistics and Cronbach's alpha (α)

		N	M	SD	α
Personal Attitude					.881
PA1	I will be happy to be an entrepreneur.	180	4.31	1.042	
PA2	Entrepreneurship is good for me.	180	4.28	.917	
PA3	I would prefer to be an entrepreneur than work for someone	180	4.16	.987	
PA4	I would benefit a lot from entrepreneurship	180	4.14	.981	
PA5	If I had enough capital I will start my own business	180	4.51	.925	
Perceived Behavioural Control					.845
PBC1	I am ready to start a new business.	180	4.11	.962	

PBC2	I can start a new business on my own	180	3.89	.931	
PBC3	I have adequate knowledge on how to start a new business	180	3.86	.910	
PBC4	I have adequate knowledge of how to start new projects.	180	3.82	.975	
PBC5	I know that if I start a new business I will succeed.	180	4.01	.980	
PBC6	It is not difficult to keep a business working.	180	3.93	.909	
Subjective Norms					.869
SN1	I will seek advice from my family members on starting a new business.	180	3.53	1.126	
SN2	I will seek advice from my friends on starting a new business.	180	3.19	1.182	
SN3	I will seek advice from influential people on starting a new business.	180	3.39	1.179	
Entrepreneurial intentions					.833
EI1	I will commit myself to be an entrepreneur.	180	4.14	1.029	
EI2	I will put all my effort order to run a new business	180	4.45	.687	
EI3	I am not sure whether I will start a new business in future.	180	4.20	.949	
EI4	I am certain that I will start a new business in future	180	4.37	.755	
EI5	I aim to be a business person in future.	180	4.39	.808	
EI6	I have a faint hope to start a new business in future.	180	4.40	.875	

According to Table 2, the results of the research revealed that the average score of responses to the variable of personal attitude ranges from 4.14 to 4.51 indicating that respondents agreed to the item statements under the construct.

The findings in Table 2 also indicate that the average score of responses to the construct of perceived behavioural control ranged from 3.82 to 4.11 indicating that in general respondents agreed to the item statements included under the construct.

The findings for the construct of subjective norms indicate that the average score of responses ranged from 3.19 to 3.53. This is slightly above the neutral value of 3.5, meaning that respondents were indifferent about some of the item statements.

The findings on the last construct – entrepreneurial intentions indicate that the average score of responses on the item statements ranged from 4.14 to 4.40 indicating an agreement to the item statements by the respondents.

The researchers employed Cronbach’s alpha in order to test the reliability index of all the scale items. A cut off point of .70 was used and as depicted in Table 2 all the Cronbach’s alpha coefficients were very good since they exceeded the minimum acceptable value. The coefficient values ranged from .833 to .881. This indicates that all the items in the test measured the same construct.

6.3. Confirmatory factor analysis

In order to assess the factorability of data for factor analysis, the Kaiser-Meyer-Olkin and Bartlett’s Test of Sphericity was employed. All the Kaiser-Meyer-Olkin values were above the suggested minimum value of .6 (Tabachnick and Fidell, 2007) and Bartlett’s Test of Sphericity values was significant ($p < .05$). The KMO values for the constructs were considered to be good and were as follows: personal attitude (.868), perceived behavioural control (.804), subjective norms (.711) and entrepreneurial intentions (.830).

Because the sample was considered adequate to run factor analysis – a confirmatory factor analysis with the Varimax rotation was executed to identify the factors for this study. The results are depicted in Table 3.

Table 3 Rotated factor matrix for four factors

Construct	Indicator	Factor loading	Average Variance explained
Personal attitude	PA1	.799	.68
	PA2	.822	
	PA3	.686	
	PA4	.784	
	PA5	.751	
Perceived behavioural control	PBC1	.561	.57
	PBC2	.688	
	PBC3	.795	
	PBC4	.750	
	PBC5	.672	
	PBC6	.659	
Subjective norms	SN1	.824	.79
	SN2	.907	
	SN3	.909	
Entrepreneurial intentions	EI1	.532	.57
	EI2	.650	

	EI3	.822	
	EI4	.624	
	EI5	.703	
	EI6	.752	

6.4. Structural model

The hypothesised model was estimated using maximum likelihood in AMOS version 24. The goodness of fit indices were examined using the chi-square (χ^2) test statistics/degrees of freedom (df) ratio, RMSEA \leq 0.08 (MacCallum et al., 1996), NFI which ranges from .8 to .9 (Shimizutani, 2008) and TLI which are close to .9 (Schumacher, 2010), IFI \geq .9 (Hooper et al., 2008), CFI $>$.9 (Hair et al., 2008). The results show acceptable model fit indices: $\chi^2 = 334.279$; $d.f = 164$; $p = .000$; NFI = .832; IFI = .907; TLI = .877; CFI = .904, RMSEA = 0.076 PCLOSE (.000).

Because the output of the fit indices revealed that the hypothesised model did fit well with the sample data. This model was then employed to test the hypotheses. The output of the SEM for the hypothesised model is portrayed in Figure 1.

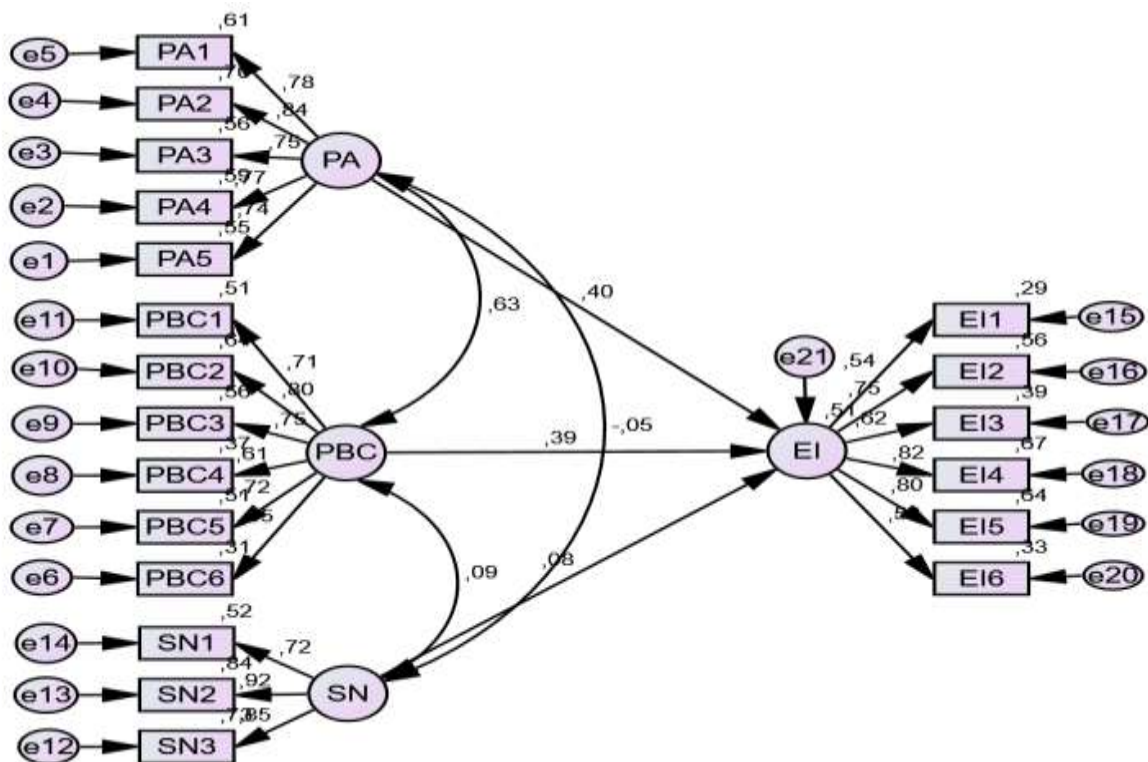


Figure 1 Standardised estimates of the structural equation model tests

The result structural model test show that personal attitude ($p < .001$; $\beta = .398$) and perceived behavioural control ($p < .001$; $\beta = .391$) are positively correlated to behavioural intentions. The results support $H1$ and $H2$ respectively. Subjective norms had no significant relationship with entrepreneurial intentions ($p = .260$). As a result, hypothesis $H3$ is not statistically supported.

7. Discussions and implications

First, the results of this study revealed that a significant positive correlation between commerce students' attitudes and entrepreneurial intentions does exist. The results are in line with prior research findings (Kautonen, et al., 2013; Roy, 2017) that also found a significant positive correlation between the two constructs. Second, the results showed that perceived behavioural control has a positive correlation with entrepreneurial intentions. This also confirms the results of previous researchers (Munir et al., 2019; Yurtkorua et al., 2014). Third, the results revealed that subjective norms had no significant effect on entrepreneurial intentions. The results are generally inconsistent with previous studies that indicated that the two constructs have a positive relationship (Pejic et al., 2018; Uddin and Bose, 2012). The results of this study, which shows that personal attitude and perceived behavioural control had a significant correlation with entrepreneurial intentions and that subjective norms did not have any significant relationship means that within the Zimbabwean context the TPB can partially explain entrepreneurial intentions of university postgraduate students.

The results of the study have some theoretical implications that relate to the applicability of the TPB to explain the entrepreneurial intention in the socio-economic context of Zimbabwe. This study sets the tone about substantiating the applicability of the TPB to Zimbabwe. The study has revealed that personal attitude and perceived behavioural control are good antecedents of entrepreneurial intention. Though subjective norms did not have a significant relationship with entrepreneurial intentions, the TPB is partially applicable and these results are generally consistent with prior research. Therefore, local universities may impart knowledge that creates positive attitudes and enhance perceived behavioural control to equip university graduates with the desire to start new business ventures.

In terms of practical applications of the findings, the comprehension of the antecedents of entrepreneurial intentions is important to universities and business practitioners as they would use the results as the basis upon which entrepreneurship can be promoted amongst university students. In their training activities, universities should create an entrepreneurial mindset and positive attitude in students so that entrepreneurship could be regarded as the best alternative for formal employment, especially if one considers the high levels of unemployment in Zimbabwe which is estimated to be above 90%. As a consequence, policymakers may need to support entrepreneurial programs and support students who have innovative ideas about new venture creation.

8. Limitations and future research

Because of the fast-changing socio-economic conditions in Zimbabwe, the studying of the determinants of entrepreneurial intentions using a single cross-sectional design is not applauded since results reflect a picture of what were the determinants of entrepreneurial intentions at the time of data collection. New conditions have since emerged in the economy that may motivate or demotivate individuals to venture into businesses. As such, further research may be undertaken using a longitudinal approach which may look at the problem over a relatively long time – whereby one might implement measures at different time intervals to examine the relationships set out in the proposed model. There is room to observe changes in the influence of the determinants on entrepreneurial intentions.

This study has limitations that also emanate from a small sample size that was employed to examine the determinants of entrepreneurial intentions. The participants of this study were confined to commerce postgraduate students. As a result, the findings of the study cannot be generalised. Further research could be undertaken using the undergraduate and postgraduate

students from all faculties and making sure that a representative sample is considered. Future studies can also be extended to real entrepreneurs or practitioners.

There is also room for comparative studies to be done on the same topic. It is also prudent to compare the determinants of entrepreneurial intentions of students from different disciplines.

This study has taken a quantitative approach to do data analysis, future studies could take a qualitative approach to explore the antecedents of entrepreneurial intentions. This approach permits an in-depth discussion of the factors that affect the individual's entrepreneurial intentions.

The study was limited to the TPB, yet there are many determinants of entrepreneurial intentions. Further research may explore other determinants which were not part of this study. Future research must employ alternative theories to examine the determinants of entrepreneurial intentions. For example, researchers may employ the Entrepreneurial Event Model (EEM) to assess the predictability of entrepreneurial intentions.

References

1. Ajzen, I and Fishbein, M. (2005). 'The Influence of Attitudes on Behaviour' in Albarracín, et al (Eds). The handbook of attitudes, Mahwah, New Jersey, pp.173-221.
2. Ajzen, I., and Fishbein, M. (1980). Understanding attitudes and predicting social behaviour, Prentice-Hall, Englewood Cliffs, New Jersey.
3. Aloulou, W. (2016). Predicting entrepreneurial intentions of freshmen students from EAO modelling and personal background: A Saudi perspective. *Journal of Entrepreneurship in Emerging Economies*, 8(2), pp.180-203.
4. Aragon-Sanchez, A., Baixauli-Soler, S. and Carrasco-Hernandez, A. (2017). A missing link: the behavioural mediators between resources and entrepreneurial intentions. *International Journal of Entrepreneurial Behaviour and Research*, 23(5), pp.752-768.
5. Arrighetti, A., Caricati, L., Landini, L. and Monacell, N. (2016). Entrepreneurial intention in the time of crisis: a field study. *International Journal of Entrepreneurial Behaviour and Research*, 22(6), pp.835-859.
6. Armitage, C. and Conner, M. (2001). Efficacy of the theory of planned behaviour: a meta-analytic review. *British Journal of Social Psychology*, 40, pp.471-499.
7. Bird, B., (1988). Implementing entrepreneurial ideas: the case of intention. *Academy of Management Review*, 13(3), pp.143-168.
8. Bosma, N and Levie, J. (2010). *Global Entrepreneurship Monitor 2009, Executive Report*, Bobson College.
9. Cardon, M.S. and Kirk, C.P. (2015). Entrepreneurial passion as a mediator of the self-efficacy to persistence relationship. *Entrepreneurship Theory and Practice*, 39(5), pp.1027-1050.
10. Debarliev, S., Janeska-Iliev, A., Bozhinovska, T. and Ilieva, V. (2015). Antecedents of entrepreneurial intentions: evidence from the Republic of Macedonia. *Business and Economic Horizon*, 11(3), pp.143-161.

11. Ebiringa, O.T. (2013). Entrepreneurship development for sustainable economic transformation: a study of you win programme in eastern states of Nigeria. *Journal of Sustainable Development in Africa*, 15(5), pp.49-59.
12. Hair, J.F., Anderson, R.E., Tatham, R.L., and Black, W.C. (2008). *Multivariate Data Analysis*, 7th ed., Prentice-Hall, Upper Saddle River, New Jersey.
13. Hooper, D., Coughlan, J. and Mullen, M.R. (2008). Structural equation modelling: guidelines for determining model fit. *Electronic Journal on Business Research Methods*, 6(1), pp.53-60.
14. Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, 39, pp.1–36.
15. Kautonen, T., Van Gelderen, M. and Tornikoski, E.T. (2013). Predicting entrepreneurial behaviour: A test of the theory of planned behaviour. *Applied Economics*, 45(6), pp.697-707.
16. Liñán, F. and Chen, Y.W. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 33, pp.593–617.
17. Liñán, F. and Rodríguez, J.C. (2004). Entrepreneurial attitudes of Andalusian university students. Paper presented at the 44th ERSA Conference 21-25 August 2004. Porto, Portugal.
18. MacCallum R.C., Browne M.W. and Sugawara H.M. (1996). Power analysis and determination of sample size for covariance structure modelling. *Psychological Methods*, 1, pp.130–49.
19. Majoni, T., Matunhu, J. and Chaderopa, B. (2016). SMEs Policies and Challenges: A Comparative Analysis of Zimbabwe and South Korea. *International Journal of Scientific and Research Publications*, 6(6), pp.377-384.
20. Munir, H., Jianfeng, C. and Ramzan, S. (2019). Personality traits and the theory of planned behaviour comparison of entrepreneurial intentions between an emerging economy and a developing country. *International Journal of Entrepreneurial Behaviour and Research*, 25(3), pp.554-580.
21. Nguyen, C. (2017). The entrepreneurial intention of international business students in Viet Nam: a survey of the country joining the Trans-Pacific Partnership. *Journal of Innovation and Entrepreneurship*, 6(7), pp.1-13.
22. Pejic, B.M., Aleksic, A. and Merkac-Skok, M. (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), pp.1453-1471.
23. Remeikiene, R. D., Startiene, G. and Dumciuviene, D. (2013). Explaining entrepreneurial intention of university students: the role of entrepreneurial education. *International Proceedings of the Management, Knowledge and Learning International Conference*, Zadar, Croatia, pp.299-307.
24. Roy, R., Akhtar, F. and Das, N. (2017). Entrepreneurial intention among science and technology students in India: Extending the theory of planned behaviour. *International Entrepreneurship and Management*, 13, pp.1013–1041.

25. Schumacker, R.E. and Lomax, R.G. (2010). A beginner's guide to structural equation modelling, 3rd ed., Routledge, New York.
26. Tabachnick, B.G. and Fidell, L.A. (2007). Using Multivariate Statistics, Pearson Education, New York.
27. Uddin, M. and Bose, T. (2012). Determinants of the entrepreneurial intention of business students in Bangladesh. *International Journal of Business and Management*, 7(24), pp.128-137.
28. Wu, S and Wu, L. (2008). The impact of higher education on entrepreneurial intentions of university students in China. *Journal of Small Business and Enterprise Development*, 15(4), pp.40–655.
39. Van Gelderen, M., Brand, M., van Praag, M., Bodewes, W., Poutsma, E. and van Gils, A. (2008). Explaining entrepreneurial intentions by means of the theory of planned behaviour. *Career Development International*, 13(6), 538-559.
30. Yurtkorua, E.S., Kuşçub, Z. K. and Doğanayc, A. (2014). Exploring the antecedents of entrepreneurial intention on Turkish university students. *Procedia - Social and Behavioural Sciences*, 150, 841–850.