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ANTECEDENTS OF ENTREPRENEURIAL INTENTIONS AMONGST HIGHER EDUCATION STUDENTS IN SOUTH AFRICA

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Abstract
South Africa is confronted with the problem of youth unemployment. Despite this challenge, young people have few options to stay relevant in the economy. While many young people consider starting a business, they face obstacles such as a lack of information, capital, networking, and mentorship. This makes it very difficult for young people, particularly university graduates, to pursue entrepreneurship as an alternative career. This study examined the antecedents of entrepreneurial intentions amongst higher education students in South Africa. A quantitative and descriptive research design was adopted using a positivist research philosophy. A self-administered online questionnaire was used to gather data. A total of 400 students were chosen as respondents using simple random sampling. The findings of this study show that entrepreneurial intention has a positive and significant relationship with subjective norms (β=0.619, t-value=8.197, p=0.050), perceived behavior control (β=0.171, t-value=1.969, p=0.050), personal attitude (β=0.137, t-value=1.967, p=0.050). In contrast, there was a negative and insignificant relationship between entrepreneurial intention and self-efficacy (β=-0.015, t-value=0.209, p=0.835). This research has contributed to the literature on entrepreneurship in higher education and the developing world. This study is also expected to aid scholars, practitioners, and policymakers in understanding the dynamics of entrepreneurial intentions amongst students in higher education institutions.
Keywords: Entrepreneurship, Unemployment, Higher Education Institutions, Youth, Entrepreneurship Intention.
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1. INTRODUCTION

In South Africa, 63.4 percent of young people are unemployed. This is concerning because youth between the ages of 15 and 34 have a high unemployment rate. In the first quarter of 2019, the unemployment rate among graduates aged 15–24 was around 31%, compared to 19.5 percent in the previous quarter (Statistics South Africa, 2019). Despite considerable policy attention and various public and private initiatives, the country's democratic transition has resulted in high youth employment rates. The problem

has now progressed to the point where it could be classified as chronic (Graham & De Lannoy, 2016). The lack of regular budget allocation and reporting in the Estimates of National Expenditure (ENE) by government departments and agencies responsible for fostering business development in the country reflects the low levels of economic empowerment among young people (Department of Trade and Industry, 2013). Overall levels of education and training, social and cultural norms, and the regulatory environment influence early-stage entrepreneurial activity in South Africa. The fact that education continues to be a limiting factor in South Africa contradicts findings in other developing or efficiency-driven economies, where education (as a limiting factor) is not as important as it is in South Africa (Herrington et al., 2010).

Furthermore, academics, practitioners, and policymakers have only recently recognised the significance of entrepreneurship. In this regard, Ndofirepi et al. (2018) believe that entrepreneurship education and training interventions should be made available to students to encourage them to develop creativity and self-efficacy. The number of unemployed graduates is on the rise, necessitating a solution to create an enabling environment and strategies to help students become self-sufficient after graduation. Furthermore, according to Mokolobate (2016), the rise of young entrepreneurs such as Mark Zuckerberg has put South African youth in the spotlight, leading to many unanswered questions about their readiness to be high-quality entrepreneurs. Therefore, this study evaluated the antecedents of entrepreneurial intentions amongst higher education students in South Africa.

2. LITERATURE REVIEW

2.1. The theoretical background of entrepreneurship

Entrepreneurship is defined as "the process of creating something valuable by devoting the necessary time and effort, accepting the associated financial, psychological, and social risks, and reaping the financial and personal satisfaction and independence" (Hisrich & Peters, 2002). Another school of thought contends that entrepreneurship is a lifelong learning experience that is best mastered through a combination of formal education and practical experience. As a result, for the training to be effective, it must be based on real-life scenarios (Halim et al., 2017). According to Rauch and Hulsink (2015), promoting entrepreneurship education can help job creation and economic growth. The primary goal of any economy is to create and maintain strong businesses that will benefit all stakeholders in the long run. According to previous research, combining "innovation and entrepreneurship" can increase revenue margins, contribute to societal well-being, improve communal integration, and boost economic growth and development (Uslu & Kedikli, 2019).

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Several studies have suggested that entrepreneurship plays a critical role in developing economies in crisis, opening up a plethora of job opportunities because as a business grows, so does the demand for labour, resulting in more job opportunities for the unemployed (Weforum, 2020). The field of entrepreneurship has evolved and broadened to include a variety of interdisciplinary approaches that are intertwined with entrepreneurial intent (Arafat et al., 2018). Because of its potential to drive economic growth, entrepreneurship has recently attracted scholarly attention. This particular interest in entrepreneurship stems from its ability to stimulate the labour market by creating jobs, which improves citizens' lives by providing them with a good income. As a result, many tertiary educational institutions have teamed up to teach people entrepreneurship skills and knowledge to increase self-employment (Prakash et al., 2015).

Entrepreneurial intention and preparation are underpinned by the theory of planned behaviour, which is an extension of the theory of reasoned action. An individual's intention to engage in a particular behaviour is at the heart of the concept of planned behaviour. These intentions are thought to represent motivating variables that drive behaviour; they show how hard people work or how willing they are to "go the extra mile" to achieve a goal (Ajzen, 1991). Attitudes, subjective norms, perceived behavioural control, and self-efficacy all influence intentions. Individuals' conscious beliefs in their inherent skills and abilities to complete tasks are defined as self-efficacy (Bandura, 1986). Attitudes are shaped by the expectation that individual actions will result in a positive outcome. Individuals' perceptions of a particular behaviour can be personally controlled, and the difficulty or ease of initiating a behaviour are captured by perceived behavioural control. Furthermore, perceived behavioural control draws attention to previous experiences as well as the presence or absence of opportunities and resources. This means that perceived behaviour control recognises the fact that many behaviours are not entirely under volitional control (Rauch & Hulsink, 2015; Armitage & Conner, 2001).

2.2. Entrepreneurial Intentions

Entrepreneurs are instrumental in contributing to economic development and play a critical role in society development. Thus, many governments worldwide are promoting entrepreneurship among people, especially the youth, to participate in society and economic development. Entrepreneurs play a crucial role in the growth of national income by increasing per capita income and can help in reducing unemployment among youth, which is one of the major problems confronting governments (Zulfiqar et al., 2017). However, in South Africa, one of the major obstacles hindering the setting up of a new business, especially for young people who come from a disadvantaged background, is access to start-up capital. Furthermore, young people in business are confronted with the challenge of access to expansion capital that can help young entrepreneurs grow their businesses from their current state to

new heights (Gwija et al., 2014). According to Tanveer et al. (2012), unstable and weak economic environments, market conditions that are not certain, stringent and unfriendly bank financing regimes, high-interest rates, a lack of skills and expertise, and the absence of family support are some of the factors discouraging young people from taking up entrepreneurship as a career.

The potential or readiness of students to be entrepreneurs can be forecasted by evaluating the entrepreneurial intentions of the students and factors that affect their intentions. The entrepreneurial intention in higher education institutions is the first step towards creating a dynamic and sustainable economy driven and maintained by innovation and entrepreneurial activities. Thus, higher education institutional managers are advised to focus their attention on improving the university's curriculum to develop students' entrepreneurial readiness or intentions. In addition, tailor-made and well-crafted formal courses and practices should be proffered to students to enhance their entrepreneurship intentions (Yıldırım et al., 2016). Fayolle and Liñán (2014) believe that several variables impact entrepreneurial intention, including the setting, institution, and educational process present at a higher education institution. Moraes et al. (2018) argued that the university environment contributes to entrepreneurial intentions such that when a university provides an enabling environment for the development of attitudinal characteristics of students, it enhances their entrepreneurial intentions. Turker and Selcuk (2009) observed that providing adequate knowledge and inspiration for entrepreneurship in institutions of higher learning or universities increases the chances for students or young people to choose entrepreneurship as a career.

According to Misoska et al. (2016), the educational system should serve as a foundation and support framework for students' entrepreneurship knowledge base. This is crucial because a solid educational system may help instil more positive attitudes towards entrepreneurship, a sense of more control, and greater societal acceptance of entrepreneurship. These elements function as a trigger for increased levels of entrepreneurial ambition. Thus, Olugbola (2017) believes that the management of higher education institutions must create an enabling environment where students can practise creating or setting up a business while at university as part of their entrepreneurship project. This can be implemented by helping students to develop practical and innovative business ideas that can be launched on campus. This will give them a chance to operationalise business ideas as done by individuals who are fully-fledged in business in the outside world. In addition, Olugbola (2017) added a need for deliberate initiatives to provide funds and resources to students who have outstanding business ideas and continuously monitor their business progress and growth process before they graduate. Furthermore, any business created by students can be used to generate revenue for the institutions. In this regard, training provided to students needs to focus on what students envisage to

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create after graduation. Thus, to enable students to acquire entrepreneurial qualities, there is a need to review how teaching is done and how education courses are designed. For example, in their curriculum, educators should include relevant content that energises and motivates students to chase life-changing goals as one way of buttressing entrepreneurial intentions. In addition, higher education institutions should harness teaching strategies through the use of mentors, role models, and presentations by eminent entrepreneurs to inculcate skills and help students achieve their educational goals. Pedagogical methods should be crafted to enhance students' awareness of the benefits of choosing entrepreneurship as a career (Ndofirepi, 2020).

Higher education institutions have a critical role to play in the development of students as future entrepreneurs. Therefore, higher education institutions need to provide students with opportunities to arouse and develop their interest in entrepreneurship. There is a belief that these interests will subsequently lead to productive and innovative ideas that will provide self-employment to young entrepreneurs (Turker & Selcuk, 2009). In this regard, it is important to introduce entrepreneurship classes at an early stage. Furthermore, coursework embedded with entrepreneurship should be offered to students throughout the educational cycle. In the early stages, the content given to students should focus on developing their interest and pro-entrepreneurial attitudes. Subsequently, education institutions should facilitate the provision of sound knowledge and skills that will enable them to create and successfully manage a business (Yıldırım et al., 2016). However, it is important to be cognisant of the fact that encouraging the youth to participate in business is of no use and unethical if deliberate efforts are not put in place to empower them with skills and knowledge that will enable them to sustain their ventures for longer periods, as is the case with some successful entrepreneurs (Staniewski & Szopiński, 2015).

2.3. Antecedents of entrepreneurial intentions

2.3.1. Perceived Attitude

Many scholars in different contexts have defined attitude. Attitude is an evaluation of things or objects which may constitute positive or negative behaviour. An individual's attitude towards a certain behaviour leads to a stronger intention to perform the behaviour (Lin et al., 2015). Personal development aimed at developing favourable attitudes towards entrepreneurship should be supported in higher education frameworks alongside incubators that improve individual attitudes towards entrepreneurship. Personal growth and incubators may also aid in the formation of social networks that will assist the entrepreneur in their endeavour. Therefore, the development of incubators where the entrepreneur may receive balanced support and a holistic strategy is advocated (Fenech et al., 2019). In Africa, youth have a

positive attitude towards entrepreneurship such that they are, in many ways, actively involved and fully aware of the importance of entrepreneurship. In addition, most of the youth in Africa have shown great zeal for an entrepreneurial career because it provides an opportunity for one to gain personal independence. This simply means that most youths have a positive attitude, would love to be self-employed, and believe that entrepreneurship provides that platform (Adebayo & Kavoos, 2016). Attitude is defined as one's capacity to perform or act in a certain way and is also shown in terms of one's behaviour. Therefore, an attitude towards entrepreneurship is the willingness shown by an individual to be involved in becoming a business person. It is important to highlight that in the process of becoming an entrepreneur, the individual has to firstly show an intention to embark on entrepreneurship, which is subsequently reflected in the attitude of the person (Tengku et al., 2020).

2.3.2. Perceived Behaviour Control

Perceived as the principal factor for financial growth, entrepreneurship has gained a considerable place in the debate among academicians as well as policymakers. As a result of the effect of entrepreneurship on society, most students view the field of entrepreneurship as their alternative vocation (Lechner et al., 2018). Interestingly, when one considers the educational dialogue, emphasis has been placed on drivers of EI as important elements for increased interest in entrepreneurship and understanding what motivates entrepreneurial behaviour. This is critical for policymakers and educational managers since it may assist in improving the efficacy of public policies and educational initiatives (Hsu et al., 2017). PBC, as a concept, has been applied across several disciplines. PBC is an individual's control of behaviour or the challenge faced by an individual to control or carry out their behaviour. Compared to other prototypes that contribute to intentions that people have regarding entrepreneurship, PBC permits an individual to appreciate and foresee intentions that are accurately focused on social dynamics (Anh & Mai 2013). The presence of sufficient resources and the ability to control behavioural barriers have an impact on behaviour performance. Individuals sense greater behavioural control and stronger intentions to do tasks when they perceive more resources and fewer obstacles (Hardin-Fanning & Ricks, 2017).

2.3.3. Subjective Norms

Subjective norms shape people's social and political lives. As a result, these embedded norms are powerful because they directly impact people's behaviour in specific situations. To put it simply, subjective norms are unwritten rules and regulations that groups establish and follow. These individuals are expected to mould their behaviour by adhering to a set of acceptable rules and regulations. Subjective norms are also expected to be shared by others and supported by society's compliance

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(Elster, 1989). According to Rauch and Hulsink (2015), subjective or social norms are formed by trusting others' opinions about certain behaviours, such as those of family members and friends, and the degree to which people are willing to follow those opinions. Although behavioural standards are seldom formalised into official legislation or rules, they provide strict order to human activity in every aspect of social life. Indeed, their effect on social life is critical in preventing it from being ugly, brutish, and brief. Human contact may descend into psychological or even physical violence in the absence of societal rules. Everyone knows that striking another person in the face in a conversation does not convey disagreement, even if the concept is seductive at times. Norms also make it simpler for individuals to coordinate with one another, preventing ordinary life from devolving into unmanageable chaos (Anderson & Dunning, 2014).

2.3.4. Self-Efficacy

Entrepreneurship is viewed differently by researchers, taking into consideration that there are many factors at play. For instance, Chang et al. (2019) described entrepreneurship as a consequence of an individual's exhibitions and determinations, including personal characteristics such as entrepreneurial self-efficacy (ESE), which is one of the factors driving the attitude predisposition. While ESE has been identified as an antecedent of entrepreneurial efforts and intentions, it must be noted that individuals have a higher propensity to turn their intentions into action if they have a strong inner drive (Pérez-Lopez et al., 2019). Some similarities exist between self-efficacy in entrepreneurship (SE) and the expectancy theory (ET) because they both work as behavioural instruments or theories; therefore, they are often compared in the entrepreneurial field. ET is based on two expectations, which makes them slightly different. One lies in the likelihood that effort will culminate into performance, while the other lies in the likelihood that performance culminates into an outcome. The similarity of SE and ET is that they both focus on individual self-assessments of their capabilities and are concerned with performance (Chen et al., 1998; Shaheen & AL-Haddad, 2018).

2.3.5. Relationship Between Personal Attitude, Perceived Behaviour Control, Self-Efficacy, and Subjective Norm and Entrepreneurial Intention

The relationship between the antecedent of students' readiness and entrepreneurial intention is well documented in the literature (Ajzen, 1991). A study conducted among entrepreneurial students in Macedonia found that attitude, perceived behaviour control, and subjective (social) norms significantly influence entrepreneurial intentions (Misoska et al., 2016). Similarly, the relationship between self-efficacy and the entrepreneurial intention was significant (Moraes et al., 2018). Another study conducted

in Turkey on entrepreneurial intention among international students revealed that personal attitude, perceived behaviour control, and subjective norm have a positive and significant relationship with entrepreneurial intention (Usman & Yenita, 2019). Previous research has reported a positive association between attitude and EI (Fantaye, 2019), whereas other researchers have found a negative relationship (Benachenhou et al., 2017). In addition, previous research findings have revealed that business intentions might change due to education specialisations (Maresch et al., 2016). Other studies have also found that self-efficacy and emotional attitude have a significant relationship with intention (Huang & Chen, 2015; Conner et al., 2015). Similarly, a strong and positive link between EI and attitude has been discovered (Agolla et al., 2019). Huang and Chen (2015) have also sought to understand attitude and other concepts such as PBC. Thus, the TPB has shown that both attitude and PBC are determinants of EI. Thus, Figure 1 shows the relationships that are hypothesised in this study.

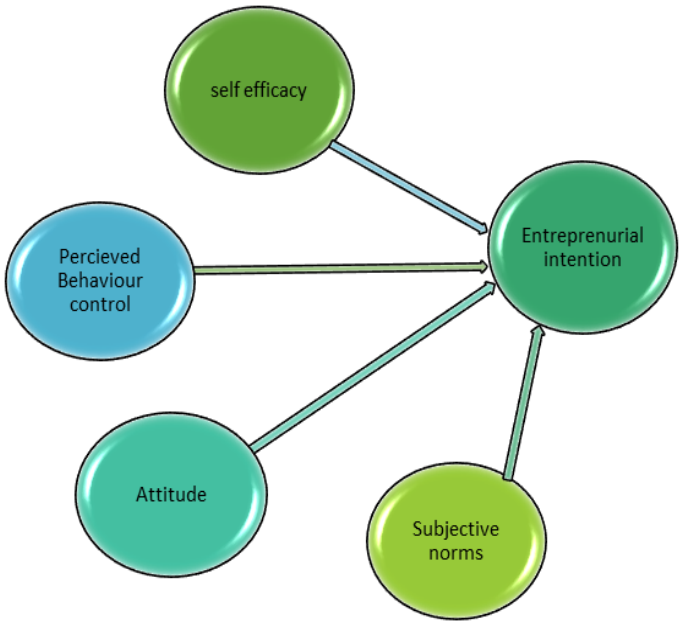

FIGURE 1. CONCEPTUAL MODEL

Source: Author

3. RESEARCH METHODOLOGY

3.1. Research design and sampling

Research design is a blueprint developed to guide the research process, such as collecting and analysing data (Pandey & Pandey, 2015). Research design is multidimensional, encompassing exploratory, causal, and descriptive aspects. This study adopted a quantitative and descriptive design to

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ascertain the relationship between variables (Sekaran & Bougie, 2016). In this study, descriptive research was used. Descriptive research aims to describe the characteristics of a phenomenon. Descriptive research is further used to ascertain the relationship between variables (Nassaji, 2015). Respondents were chosen using a simple random sample method in this study. Thus, simple random sampling is a procedure in which each population element has an equal probability of being chosen. A total of 400 students were used as respondents in this study; however, 332 responses were collected. Previous research on entrepreneurial intention in the higher education sector at a South African university (Boris & Pendame, 2015) and a Nigerian university (Chukwuma-Nwuba, 2019) utilised a comparable sample size. The questionnaire in this study was developed from existing constructs or variables and was adapted to suit the context (Iqbal et al., 2012; Martins et al., 2018). A Likert scale – with answers ranging from "strongly disagree", representing scale number 1, to "strongly agree", representing scale number 5 – was used to evaluate the student feeling (Saunders et al., 2006) on entrepreneurial intention. The data was analysed using both descriptive and inferential statistics. In addition, the data analysis was done using a structural equation model through a statistical package known as SmartPLS3.

4. RESULTS

4.1. Reliability and Validity Analysis

As shown in Table 1, Cronbach's alpha scores for all the constructs were above the recommended value of 0.70. The composite reliability measured for all the constructs were above the recommended value of 0.70, as suggested by Viladrich et al., (2017). This suggests that the constructs have good reliability. The AVE for all the constructs has values above the recommended value (0.5), which suggests adequate convergent validity. According to Gu et al., (2019), convergent validity is deemed to be adequate if the latent variables have values above 0.5.

TABLE 1. CONSTRUCT RELIABILITY AND VALIDITY

Codes	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
EI	0.877	0.877	0.907	0.619
PA	0.767	0.783	0.851	0.589
PBC	0.858	0.859	0.894	0.585
SE	0.803	0.803	0.871	0.628
SN	0.820	0.820	0.881	0.650

Note: EI=Entrepreneurial Intention; PA=Perceived Attitude; PBC=Perceived Behaviour Control; SE=Self Efficacy; SN=Subjective Norms

Source: Author

4.2. Discriminant Validity

Discriminant validity measures the degree to which measures of various constructs diverge or have a minimal association with one another (Engellant et al., 2016). Because the square root of the AVE values on the diagonal (EI=0.787; PA=0.767; PBC=0.765; SE=0.793 and SN=0.806) are higher than the values below, all the constructs met the Fornell–Larker criterion for discriminant validity. Table 2 further shows that the correlations among latent constructs were more than the square root of the average variances retrieved. As a result, this indicates that sufficient discriminant validity had been obtained.

TABLE 2. DISCRIMINANT VALIDITY

	EI	PA	PBC	SE	SN
EI	**0.787**				
PA	0.644	**0.767**			
PBC	0.766	0.708	**0.765**		
SE	0.664	0.767	0.746	**0.793**	
SN	0.637	0.642	0.724	0.707	**0.806**

Note: The diagonals represent the square root of the AVE, whereas the other entries reflect the squared correlation.

Source: Author

4.3. Model Analysis

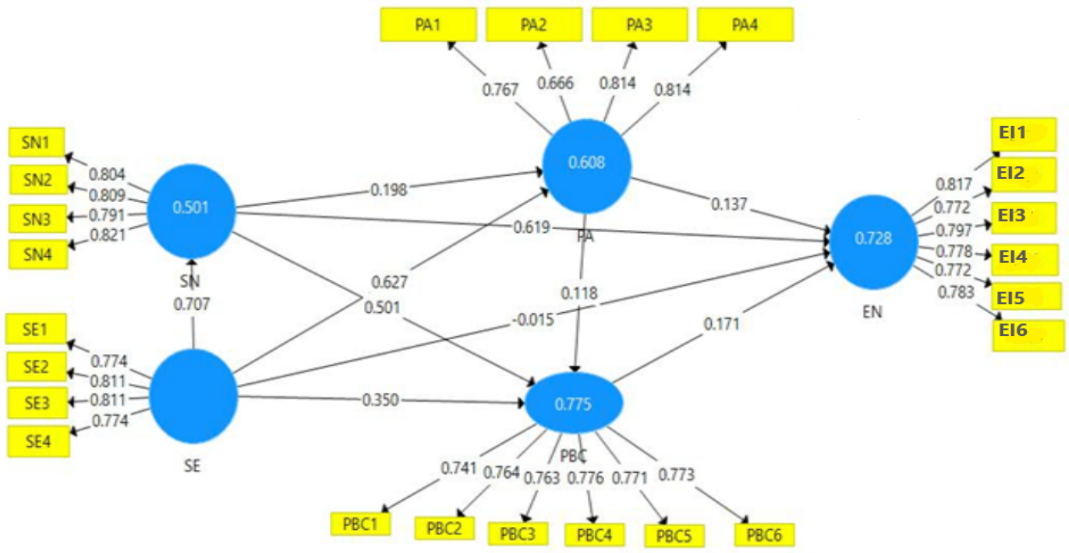

FIGURE 2. SMART PLS3 MODEL

Source: Author

Asparouhov and Muthen (2018) revealed that a model is approximately well-fitting if the estimated and observed correlations are less than 0.08 apart. The SRMR value measured (0.059) was less than 0.08,

which suggests that the model was a good fit (Table 3), whereas Figure 2 shows the results of the structural model assessment and the corresponding relationship, the results of which are further discussed in section 4.4 and tabulated in Table 4. The normed fit index (NFI) for the model was 0.817. According to Akkus (2019) and Byrne and Campbell (1999), an NFI value of more than 0.80 indicates a good fit, and more than 0.95 indicates an excellent fit.

TABLE 3. SMARTPLS3 MODEL FITNESS

	Saturated Model
SRMR	0.059
d_ULS	1.057
d_G	0.468
Chi-Square	870.190
NFI	0.817

Source: Author

4.4. Relationship between Perceived Attitude, Perceived Behaviour Control, Subjective Norm, and Self-Efficacy and Entrepreneurship Intention

According to the regression estimate data in Table 4, the relationship between perceived attitude (PA) and entrepreneurship intention (EI) was significant (β=0.137, t-value=1.967, p=0.050). The relationship between perceived behaviour control (PBC) and entrepreneurship intention (EI) was significant (β=0.171, t-value=1.969, p=0.050). The relationship between self-efficacy (SE) and entrepreneurship intention (EI) was negative and not significant (β=-0.015, t-value=0.209, p=0.835), as shown in Table 4. The relationship between subjective norms (SN) and entrepreneurship intention (EI) was significant (β=0.619, t-value=8.197, p=0.050) as indicated in Table 4.

TABLE 4. REGRESSION ESTIMATE

	Original Sample (O)	**TStatistics (|O/STDEV|)**	**P-Values**	**Result**
PA -> EI	0.137	1.967	0.050	**Supported**
PBC -> EI	0.171	1.969	0.050	**Supported**
SE -> EI	-0.015	0.209	0.835	**Unsupported**
SN -> EI	0.619	8.197	0.050	**Supported**

Source: Author

5. DISCUSSION

The aim of this study was to evaluate the antecedents of entrepreneurial intentions amongst higher education students in South Africa. The findings of this study show that the relationship between perceived attitude (PA) and entrepreneurship intention (EI) was significant. Another study conducted among Master of Business Administration (MBA) students found that attitude towards entrepreneurship influences entrepreneurial intention (Amofah et al., 2020). Thus, universities should focus their entrepreneurship promotion programmes on developing potential entrepreneurs' attitudes, conveying the message that, despite the challenges that accompany launching a spin-off, entrepreneurship can be an exciting alternative for academics and one that complements their teaching and research work, which the experience can bolster gained (Miranda et al., 2017). Further analysis has shown that the relationship between perceived behaviour control (PBC) and entrepreneurship intention (EI) was significant. The findings of this study are in sync with a study conducted on private students in Bahrain, which found a significant positive relationship between students' PBC and their EI (Al-Shammari & Waleed, 2017). In addition, individuals who value the benefits and rewards of starting, managing, and growing a business are more likely to have a high EI. Individuals who believe that they are competent in carrying out the duties required to start, manage, and expand a business are also more inclined to participate in the activity (Mwiya et al., 2017). In the same vein, Doanh and Bernat (2019) argued that the belief in one's ability to do a task well has a substantial impact on one's intention and behaviour, while the TPB also claims that people's perceptions of behavioural control and attitudes towards behaviour are influenced by their control beliefs.

The analysis of the relationship between self-efficacy (SE) and entrepreneurship intention (EI) was found to be negative and not significant. Despite this finding, in a study conducted among Malaysian students, Pihie and Bagheri (2013) found that SE has a positive and significant relationship with EI. Similarly, a study on the effects of SE on college students' EI in China found a significant relationship between them (Liu et al., 2019). Conversely, the findings of this study partially agree with the findings of Amofah et al. (2020), who found that the relationship is not significant but differ with regard to the relationship being positive. To summarise, the findings of this study imply that a high level of entrepreneurial SE might not boost college students' confidence in their entrepreneurial abilities, commitment and desire to start a business. Another analysis was conducted to ascertain the relationship between subjective norms (SN) and entrepreneurship intention (EI), and the relationship was found to be positive and significant. A study conducted on EI determinants in Pakistan found that SN is a significant predictor of EI (Anjum et al., 2018). Obschonka et al. (2012) observed that in research on entrepreneurial intentions, it was found that SN, particularly among individuals with strong

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group identification, are predictors of intention, which is indicative of a collective culture (similar to the culture within which this study was based). This research implies that the social environment influences students' decisions to become entrepreneurs.

6. CONCLUSION

This study sought to assess the antecedents of entrepreneurial intentions amongst higher education students in South Africa. According to the findings, the relationship between subjective norms, perceived behaviour control, personal attitude, and entrepreneurship intention was positive and significant. In contrast, there was a negative and insignificant relationship between self-efficacy and entrepreneurship intention. Based on the findings of this study, higher education institutions should organise outreach activities such as entrepreneurship seminars, business incubation, and training for both students and faculty members to develop their interest in entrepreneurship. Faculty members must understand the benefits of entrepreneurship to instil this knowledge in students and encourage them to aspire to be job creators through entrepreneurship ventures rather than just job seekers. Because society has traditionally conditioned students to graduate and work in high-paying jobs in either the public or private sector of the economy, there is a high predisposition of students moving into white-collar jobs. Therefore, higher education institutions should raise student awareness about the importance of embracing an entrepreneurial culture to change students' attitudes and mindsets. In addition, the curriculum must be redesigned and calibrated to include entrepreneurship or aspects of it to promote the spirit of entrepreneurship as a key to survival. Students should understand that entrepreneurship is a viable alternative to traditional employment and thrive without white-collar jobs after graduation. Students will be more enthusiastic about embracing entrepreneurship as a way of life if this mindset is instilled in them. Higher education institutions are encouraged to develop self-employment graduate programs that incentivise or provide seed money to students who want to start their businesses while at university. Future research could concentrate on a comparative analysis of student entrepreneurial readiness across multiple institutions. This will aid in identifying the differences in key attributes valued as antecedents of EI by students from various institutions.

REFERENCES

Adebayo, G. S. & Kavoos, M. (2016). The present attitude of African youth towards entrepreneurship. *International Journal of Small Business and Entrepreneurship Research*, 4(1), 21-38.

Agolla, J. E., Monametsi, G. L. & Phera, P. (2019). Antecedents of entrepreneurial intentions amongst business students in a tertiary institution. *Asia Pacific Journal of Innovation and Entrepreneurship*, 13(2), 138-152.

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

Akkus, A. (2019). Developing a Scale to Measure Students' Attitudes toward Science. *International Journal of Assessment Tools in Education*, 6(4), 706-720.

Al-Shammari, M. & Waleed, R. (2018). Entrepreneurial intentions of private university students in the kingdom of Bahrain. *International Journal of Innovation Science*, 10(1), 43-57.

Amofah, K., Saladrigues, R. & Akwaa-Sekyi, E. K. (2020). Entrepreneurial intentions among MBA students. *Cogent Business & Management*, 7(1), 1-23.

Anderson, J. E. & Dunning, D. (2014). Behavioural norms: Variants and their identification. *Social and Personality Psychology Compass*, 8(12), 721-738.

Anh, P. T. & Mai, N. Q. (2013). Factors affecting small enterprises in Vietnam. *International Journal of Business and Social Science*, 5(1), 53-62.

Anjum, T., Sharifi, S., Nazar, N. & Farrukh, M. (2018). Determinants of entrepreneurial intention in perspective of theory of planned behaviour. *Management Theory and Studies for Rural Business and Infrastructure Development*, 40(4), 429-441.

Arafat, M. Y., Saleem, I., Dwivedi, A. K. & Khan, A. (2018). Determinants of agricultural entrepreneurship: a GEM data-based study. *International Entrepreneurship and Management Journal*, 16(1), 345-370.

Armitage, C. J. & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-a analytic review. *The British Journal of Social Psychology*, 40(4): 471-499.

Asparouhov, T. & Muthén, B., (2018). *SRMR in Mplus. Technical appendix.* Los Angeles, US: Muthén & Muthén.

Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Clinical and Social Psychology*, 4(3), 359-373.

Boris, U. & Pendame, R. (2015). Perseverance among university students as an indicator of entrepreneurial intent. *South African Journal of Higher Education*, 29(5): 263-278.

Byrne, B. M. & Campbell, T. L. (1999). Cross-cultural comparisons and the presumption of equivalent measurement and theoretical structure: A look beneath the surface. *Journal of Cross-Cultural Psychology*, 30(5), 555-574.

Chang, S. H., Shu, Y., Wang, C. L., Chen, M. Y. & Ho, W. S. (2019). Cyber-entrepreneurship as an innovative orientation: does positive thinking moderate the relationship between cyber entrepreneurial self efficacy and cyber-entrepreneurial intentions in non-IT students?. *Computers in Human Behaviour*, 107(2020): 1-8.

Chen, C., Greene, P. & Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing*, 13(4), 295-316.

Chukwuma-Nwuba, E. O. (2019). The Effect of Entrepreneurship Education Programme on Nigerian Graduates' Entrepreneurial Intentions. Doctoral Thesis, University of Northampton.

Conner, M., McEachan, R., Taylor, N., O'Hara, J. & Lawton, R. (2015). Role of affective attitudes and anticipated affective reactions in predicting health behaviors. *Health Psychology*, 34(6): 642-652.

Department of Trade and Industry. (2013). *Creating New Business Opportunities for Young Women and Men in South Africa: Youth Enterprise Development Strategy*. Pretoria, South Africa: DTI.

Doanh, D. C. & Bernat, T. (2019). Entrepreneurial self-efficacy and intention among Vietnamese students: A meta analytic path analysis based on the theory of planned behavior. *Procedia Computer Science*, 159: 2447-2460.

Elster, J. (1989). Social norms and economic theory. *Journal of Economic Perspectives*, 99-117.

Engellant, K. A., Holland, D. D. & Piper, R. T. (2016). Assessing convergent and discriminant validity of the motivation construct for the technology integration education (TIE) model. *Journal of Higher Education Theory & Practice*, 16(1), 37-50.

Fantaye, M. D. (2019). Factors Affecting Entrepreneurial Intention Among Graduating Students at Debre Berhan University, Ethiopia. *Journal of Investment and Management*, 8(1): 25-31.

Fayolle, A. & Liñán, F. (2014). The future of research on entrepreneurial intentions. *Journal of Business Research*, 67(5), 663-666.

Fenech, R., Baguant, P. & Ivanov, D. (2019). Entrepreneurial attitudes, self-efficacy, and subjective norms amongst female Emirati entrepreneurs. *International Journal of entrepreneurship,* 23(1), 1- 11.

Graham, L. & De Lannoy, A. (2016). *Youth unemployment: what can we do in the short run?* Retrieved 10 March, 2021, from: https://www.polity.org.za/article/youth-unemployment-what-can-we do-in-the-short-run2016-12-13

Gu, D., Guo, J., Liang, C., Lu, W., Zhao, S., Liu, B. & Long, T. (2019). Social media-based health management systems and sustained health engagement: TPB perspective. *International Journal of Environmental Research and Public Health*, 16(9), 1495.

Gwija, S. A., Chuks, E. E. & Iwu, C. G. (2014). Challenges and prospects of youth entrepreneurship development in a designated community in the Western Cape, South Africa. *Journal of Economics and Behavioral Studies*, 6(1). 10-20.

Hair, J.F., William, C.B., Barry, J.B., & Rolph E.A. (2010). *Multivariate Data Analysis,* Englewood Cliffs, NJ: Prentice Hall.

Halim, H. A., Ahmad, N. H., Ramayah, T. & Hanifah, H. M. (2017). Entrepreneurial readiness towards venture creation among bop community. *International Journal of Entrepreneurship*, 21(2), 1-12.

Hardin-Fanning, F. & Ricks, J. M. (2017). Attitudes, social norms and perceived behavioural control factors influencing participation in a cooking skills program in rural Central Appalachia. *Global Health Promotion*, 24(4): 43-52.

Herrington, M., Kew, J., Kew, P. & Monitor, G. E. (2010). *Tracking entrepreneurship in South Africa: A GEM perspective*. Cape Town, South Africa: Graduate School of Business, University of Cape Town.

Hisrich, R. D. & Peters, M. P. (2002). *Entrepreneurship*. 5th ed. New York, NY: McGraw-Hill.

Huang, C. C. & Chen, T. H. (201)5. Moral norm and the two-component theory of planned behaviour model in predicting knowledge sharing intention: A role of mediator desire. *Psychology*, 6(13), 1685-1699.

Iqbal, A., Melhem, Y. & Kokash, H. (2012). Readiness of the university students towards entrepreneurship in Saudi Private University: An exploratory study. *European Scientific Journal*, 8(15),110-131.

Lechner, C.M., Sortheix, F.M., Obschonka, M. & Salmela-Aro, K. (2018). What drives future business leaders? How work values and gender shape young adults' entrepreneurial and leadership aspirations. *Journal of Vocational Behavior*, *107*: 57-70.

Lin, S., Goodsite, M. & Sanderson, H. (2015). Raising Public Awareness: The Role of the Household Sector in Mitigating Climate Change. *International Journal of Environmental Research and Public Health*, 12:13162-13178.

Liu, X., Lin, C., Zhao, G. & Zhao, D. (2019). Research on the effects of entrepreneurial education and entrepreneurial self-efficacy on college students' entrepreneurial intention. *Frontiers in Psychology*, 10: 869.

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 universityprograms. *Technological Forecasting and Social Change*, 104, 172-179.

Martins, F., da Cunha, J. & Serra, F. 2018. Secondary Data in Research – Uses and Opportunities. *Iberoamerican Journal of Strategic Management (IJSM)*, 17(4), 01-04.

Miranda, F. J., Chamorro-Mera, A. & Rubio, S. (2017). Academic entrepreneurship in Spanish universities: An analysis of the determinants of entrepreneurial intention. *European Research on Management and Business Economics*, 23(2), 113-122.

Misoska, A. T., Dimitrova, M. & Mrsik, J. (2016). Drivers of entrepreneurial intentions among business students in Macedonia. *Economic Research-Ekonomska Istraživanja*, 29(1), 1062-1074.

Mokolobate, K. (2016). *The real challenges to disadvantaged youth entrepreneurs*. Retrieved 30 April, 2020, from: https://www.leapco.co.za/the-challenges-to-youth-entrepreneurs-are-realsolutions/.

Moraes, G. H. S. M. D., Iizuka, E. S. & Pedro, M. (2018). Effects of entrepreneurial characteristics and university environment on entrepreneurial intention. *Revista de Administração Contemporânea*, 22(2), 226-248.

Mwiya, B., Wang, Y., Shikaputo, C., Kaulungombe, 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.

Nassaji, H. (2015). Qualitative and descriptive research: Data type versus data analysis. *Language Teaching Research*, 19(2), 129-132.

Ndofirepi, T. M. (2020). Relationship between entrepreneurship education and entrepreneurial goal intentions: psychological traits as mediators. *Journal of Innovation and Entrepreneurship*, 9(2): 1-20.

Ndofirepi, T. M., Rambe, P. & Dzansi, D. Y. (2018). The relationship among technological creativity, self-efficacy and entrepreneurial intentions of selected South African university of technology students. *Acta Commercii*, 18(1), 1-14.

Obschonka, M., Goethner, M., Silbereisen, R. K. & Cantner, U. (2012). Social identity and the transition to entrepreneurship: The role of group identification with workplace peers. *Journal of Vocational Behaviour*, 80(1), 137-147.

Olugbola, S. A. (2017). Exploring entrepreneurial readiness of youth and start-up success components: Entrepreneurship training as a moderator. *Journal of Innovation & Knowledge*, 2(3), 155-171.

Pandey, P. & Pandey, M. M. (2015). *Research methodology: Tools and techniques*. Romania: Bridge Center.

Pérez-Lopez, M. C., González-Lopez, M. J. & Rodríguez-Ariza, L. (2019). Applying the social cognitive model of career self-management to the entrepreneurial career decision: the role of exploratory and coping adaptive behaviours. *Journal of Vocational Behavior*, 112, 255-269.

Pihie, Z. A. L. & Bagheri, A. (2013). Self-efficacy and entrepreneurial intention: The mediation effect of self-regulation. *Vocations and Learning*, 6(3), 385-401.

Prakash, D., Jain, S. & Chauhan, K. (2015). Supportive government policies, locus of control and student's entrepreneurial intensity: A study of India. *J. Glob. Entrep. Res.*, 5(5): 26.

Rauch, A. & Hulsink, W. (2015). Putting entrepreneurship education where the intention to act lies: An investigation into the impact of entrepreneurship education on entrepreneurial behavior. *Academy of Management Learning & Education*, 14(2), 187-204.

Saunders, M., Lewis, P. & Thornhill, A. (2006). *Research methods for business students*. 4th ed. Cape Town, South Africa: Prentice Hall.

Sekaran, U.& Bougie, R. (2016). *Research methods for business: A skill building approach*. 7th ed. Hoboken, NJ: John Wiley & Sons Limited.

Shaheen, N. & AL-Haddad, S. (2018). Entrepreneurial self-efficacy and entrepreneurial behavior. *International Journal of Development and Sustainability*, 7(10), 2385-2402.

Shinnar, R. S., Hsu, D. K., Powell, B. C. & Zhou, H. (2018). Entrepreneurial intentions and start-ups: Are women or men more likely to enact their intentions? *International Small Business Journal: Researching Entrepreneurship*, 36(1): 60-80.

Staniewski, M. W. & Szopiński, T. (2015). Student readiness to start their own business. *Economic Research Ekonomska Istraživanja*, 28(1), 608-619.

Statistics South Africa. (2019). *Youth graduate unemployment increase in Q1.2019*. Retrieved 5 November, 2019, from http://www.statssa.gov.za/?p=12121.

Tanveer, M. A., Gillani, U. A., Rizvi, S., Latif, M., Maqbool, H. & Rizwan, M. (2012). Barriers for Business Students in Becoming an Entrepreneur in Pakistan. *Journal of Business and Management (IOSR-JBM)*, 74-82.

Tengku, M. A. T. M., Abdullah, A. M. & Mohamed, D. I. (2020). Attitude towards entrepreneurship: a study among Asnaf Millennials in Malaysia. *Asia Pacific Journal of Innovation and Entrepreneurship*, 14(1), 2-14.

Turker, D. & Selcuk, S. S. (2009). Which factors affect entrepreneurial intention of university students? *Journal of European Industrial Training*, 33, 142-159.

Uslu, Y. D. & Kedikli, E. (2019). The importance of entrepreneurship and innovation management in terms of modern businesses. *International Journal of Academic Value Studies*, 5(1), 1-11.

Usman, B. & Yenita. (2019). Understanding the entrepreneurial intention among international students in Turkey. *Journal of Global Entrepreneurship Research*, 9(10), 1-21.

Viladrich, C., Angulo-Brunet, A. & Doval, E. (2017). A journey around alpha and omega to estimate internal consistency reliability. *Anales De Psicología*, 33(3), 755-781.

Weforum. (2020). *Switzerland fast-tracks emergency aid for small businesses weathering COVID-19*. World Economic Forum. Retrieved 29 March, 2021, from: https://www.weforum.org/agenda/2020/04/switzerland-covid-19-coronavirus-small-business-loans-recession-economy/

Yıldırım, N., Çakır, Ö. & Aşkun, O. B. (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.

Zulfiqar, S., Asmi, F., Chandia, K. E., Sarwar, B. & Aziz, S. (2017). Measuring entrepreneurial readiness among youth in Pakistan through theory of planned behavior (TPB) based approach. *Business and Economic Research*, 7(1): 149-167.