# ENTREPRENEURSHIP COMPETENCIES AND ENTREPRENEURIAL INTENTION AMONG SOUTH AFRICAN STUDENTS: THE ROLE OF ENTREPRENEURSHIP EDUCATION

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#### **ABSTRACT**

Several decades of ongoing developments in entrepreneurship education have significantly influenced higher education institutions (HEIs) worldwide. Consequently, there is a growing call for entrepreneurship education to be widely offered to students across various disciplines. Recognized as a key driver of sustainable growth and development, entrepreneurship education plays a crucial role in shaping a country's economic landscape. This study aims to examine the impact of entrepreneurship education on developing entrepreneurial competencies and stimulating entrepreneurial intentions among South African students. Utilizing a quantitative research approach, data were collected from 136 final-year students enrolled in Business and Administration programs at government-funded universities in KwaZulu-Natal, South Africa, using a non-probability purposive sampling technique. The results indicate that the entrepreneurship education curricula at these universities are still in their developmental stages. Furthermore, the findings reveal that public HEIs in South Africa incorporate entrepreneurship education as part of their strategy to combat unemployment. The study concludes that entrepreneurship education curricula are essential for developing entrepreneurial competencies in students and suggests that participation in entrepreneurship education activities can enhance the entrepreneurial abilities of South African students.

**Keywords:** Entrepreneurship, Entrepreneurship Competencies, Entrepreneurial Intention, Higher Education, South African Students, Self-Employment.

#### 1. INTRODUCTION

Entrepreneurship education has developed rapidly since its emergence over two decades ago. Paek et al. (2021) intimate that entrepreneurship education impacts the promotion of entrepreneurship competences and improves entre-preneurship intention. This means that Entrepreneurship Development in Higher Education (EDHE) has been created to encourage students to succeed more economically during and after their tertiary education. During their study, en-trepreneurship education is aimed at enabling students to generate additional income and to quickly track the economic activity process. Upon graduation, students could regard enterprise as either their first choice or an alternative career, especially if they have difficulties finding a job (Bell and Bell 2020). HEIs contribute to the sustainability of societies and human enhancement by inclusion of marginalised communities deprived of the benefits of education. However, few studies consider the interceding role of entrepreneurship competence in entrepreneurship education and development. According to Ncube and Zondo (2018), entrepreneurship education is the main driving force for improving the development of entrepreneurial ability. Entrepreneurship activities promote social and economic development in many ways, as they increase individual incomes, generate more jobs, and stimulate the innovative vitality of society (Ncube 2016; Sajilan and Tehseen 2019). Entrepreneurship education provides students with foundational knowledge and competences that stimulates entrepreneurship thinking (Stuss, Makieła and Szczepańska-Woszczyna 2019). To make a country's economy strong, the focus should be on the young generation, such as University students, who have the highest potential for innovation and entrepreneurship and able to learn independently. Since cultivating the spirit of innovation and entrepreneurship is easily accomplished through the University

education systems (Jones et al., 2020), students can more easily become involved in innovation and entrepreneurship activities. In addition, it has been shown that students who receive entrepreneurship education have higher entrepreneurial intentions (van Haeperen, Meunier and Mosty 2020). Furthermore, Ferreras-Garcia, Serradell-López and Hernández-Lara (2019) assert that HEIs have an important role to play, given their influence on student's decision-making processes. These organisations shape perceptions about entrepreneurship by fostering entrepreneurial acumen instead of an intense move to produce job seekers. Providing training to instructors in entrepreneurship education helps them apply specific competences, methods, and tools to encourage confidence in students' own capabilities and to stimulate flexibility, leadership, and initiative.

An increase in the number of entrepreneurs can help the country's economy by creating jobs and reducing unem-ployment (Multan 2020). With the development of society, more and more countries have realised the importance of entrepreneurship education, with growing interest in how education can enhance entrepreneurship by encouraging innovation and competences (Stuss et al., 2019). The South African government advocates "mass entrepreneurship and innovation" and vigorously promotes entrepreneurial policies to encourage students to start businesses. To respond to national policies, universities have successively established entrepreneurship education programs, crucial in promoting student self-employment, which improves entrepreneurial competence and enhances entrepreneurial intention (Bell and Bell 2020). As a crucial social institution, HEIs assist the community by creating competencies that are the main resource in framing the structure of a social base (Yamini, Soloveva and Peng 2020). Literature points out that a significantly large number of young South Africans are insufficiently equipped with entrepreneurial competencies and lack the knowledge, competences and experience to initiate their own businesses (Elrayah 2021). This exacerbates the need to embed learning and teaching methods that will equip students and graduates with entrepreneurial competences. Students are not self-driven in becoming employers due to a lack of entrepreneurial competences (Liu et al. 2020). Herrington, Kew and Kew (2015) shared the same view, stating that the South African primary and tertiary education does not sufficiently equip graduates with entrepreneurial skills. It can be argued that this may also be a result of an environment in South Africa that is not conducive to business start-ups.

The graduate unemployment in South Africa is a major concern for many. Despite the suitability of entrepreneurship as an alternative to traditional employment, there is currently a low level of entrepreneurial start-ups in South Africa, compared to other emerging economies (Ncube and Lekhanya 2021). A critical way forward, therefore, is to expose South African youths to entrepreneurship education, thereby enabling them to escape from vicious period of unem-ployment. The likelihood of a start-up venture succeeding depends on graduates' entrepreneurship competences. En-trepreneurship education gives responsibility to students by encouraging them to do things themselves. Stuss et al., (2019) alluded that entrepreneurship education guides students towards identifying and grasping opportunities, sup-ports inventive learning, encourages confidence in the learner's own capabilities, thereby pushes students to take risks and encourages them to cooperate with their peers. Set in a South African universities, this study's broad aim was to examine the contribution of entrepreneurship education in developing entrepreneurship competencies and stimulating entrepreneurial intention among South African students in students. This study examines the contribution of en-trepreneurship education in developing entrepreneurship competencies and stimulating entrepreneurial intention among South African students. This aim weighs in on the ongoing debate in society that poses the question: Can entrepreneurship be taught and is it a learned process? Stuss et al. (2019) aver that entrepreneurship teachers often struggle to facilitate entrepreneurial classes.

#### 2. LITERATURE REVIEW

A study by Sharma et al., (2021) determined that entrepreneurship education imparted by different universities elevates the skill and efficiency in the form of innovation-based business expansions. Entrepreneurship education is concerned with fostering creative skills that can be applied in practices, education, and environments supporting innovation (Souto and Rodriguez-Lopez 2021). In a related study, Ncube and Lekhanya (2021) concluded that with the help of entrepreneurship education, universities are successful in employment generation to an extent. Patfieldet al., (2021) shown in their research that higher education impartation to society leads to enhancement in living standards, health as well as employment generation. According to Ncube and Zondo (2018), SA has the highest number of business start-up failure rates in Sub-Saharan Africa. This is as a result of the lack of an entrepreneurship culture, entrepreneurship education and youth entrepreneurship initiatives; this is of great concern, given that the economic backbone of the country is primarily premised on the growth and development of small and medium enterprises. Al-Lawati (2022) highlighted the intention of HEIs in creating job seekers rather than entrepreneurs. It may be suggested the role of HEIs is therefore important, as such institutions play a pivotal role in influencing student decisions and perceptions towards considering entrepreneurship as a career choice. Al-Lawati et al. (2022) postulated the connection between entrepreneurship and education, stating entrepreneurship stimulates innovation, employment, and economic growth. Furthermore, Al-Lawati et al. (2022) highlight the importance of developing the kind of education that will provide outcomes where students and graduates are equipped with entrepreneurship skills and attributes. The development of entrepreneurship education within educational institution programmes may provide opportunities to create human capital equipped with entrepreneurship skills and attributes (Hoang, Tran and Du 2021). Currently, entrepreneurship education does not form part of education policy in SA (Chimucheka 2014). Universities have a crucial role to play in creating a fertile ecosystem for student entrepreneurs and fostering an entrepreneurial spirit (Ghafar 2020). In developing countries like South Africa, HEIs are often expected to be the vehicles for advancing economic growth. However, Herrington and Kew (2016) argue that these institutions are not sufficiently fulfilling their role in entrepre-neurship education in terms of facilitating knowledge transfer and stimulating innovation. According to these authors, it is critical for policymakers and institutional leaders to improve EE in South Africa and foster positive entrepreneurial attitudes through the education system.

Ferreras-Garcia et al. (2019) stated many studies have been conducted in entrepreneurship, with extensive research on the pedagogy of entrepreneurship education; however, less focus has been dedicated to the impact of such an education. The research discussed the pedagogy of entrepreneurship education, to provide a critical appraisal between lecture-based teaching and learning and experiential learning, in an effort to highlight the one that seems more effective in equipping students and graduates with entrepreneurial skills and attributes (Al-Lawati et al. 2022). Bratianu, Hadad and Bejinaru (2020) suggested SA youth need a mind-set shift from an educational system that emphasises young people must engage in salaried employment after finishing their education. To deepen the reforms in entrepreneurship education, the authors fully consider the needs and characteristics of student entrepreneurs. Paying attention to the cultivation of students' entrepreneurship competence is conducive to the realization of the goals of entrepreneurship education institutions, and the overall development needs of entrepreneurial activities. Thus, entrepreneurial education and entrepreneurship mindset improve the learning environment of individuals and enhance their confidence level that will be able to solve new and unexpected issues regarding the new business development.

### 3. ENTREPRENEURSHIP EDUCATION DEFINED

Entrepreneurship education has been defined by various authors, including Chimucheka (2014) and Hoang et al. (2021), as a process of developing entrepreneurial behaviours and values in an individual. This involves enhancing a culture of creativity and innovativeness in seeking, developing, exploring and making use

of opportunities, imbibing managerial skills, and gaining management skills to effectively and efficiently run a business able to achieve profitability, business growth and sustainability. According to Souto and Rodriguez-Lopez (2021), the process can be a formal course offered by colleges and universities or an informal training programme offered by other agencies with the aim to promote entrepreneurship. Thus, entrepreneurial education is the process of enabling individuals to gain the capacity to spot business possibilities and then develop the skills, attitudes and knowledge to act on them (Ncube and Lekhanya 2021). Research indicates entrepreneurship is a combination of innate attributes, and learned knowledge and behaviours that can be advanced through education (Ncube and Zondo 2022). Al-Lawati et al. (2022) hypothesize that the entrepreneurial mindset can be taught to students in all disciplines. Souto and Rodriguez-Lopez (2021) assert learning to be entrepreneurial is the same as learning to do anything else. It is simply a form of behaviour, and behaviour is learnt and practiced.

Hoang et al. (2021) state entrepreneurship education seeks to prepare people to be responsible, enterprising individuals, able to take moderate risks, manage results and learn from outcomes. It also helps business owners and managers to learn how to avoid and solve business complications. Entrepreneurship education can help develop leadership skills, boost self-confidence, and encourage a growth-orientated entrepreneurial and managerial mind-set, and lessen the fear of failure in business (Al-Lawati et al. 2022). Corroborating that notion, Ncube and Zondo (2022) state that entrepreneurship education is the deliberate effort to communicate entrepreneurial abilities and skills, so as to empower those being taught to survive in the business world. More broadly, entrepreneurship education seeks to prepare people to be responsible and adventurous individuals, prepared to take reasonable risks, manage the results and learn from the outcomes (Ferreras-Garcia et al. 2019). For the purpose of this study, the description of enterprise education used by Claudia (2013) is applicable, i.e., entrepreneurship education is a form of structured communication of entrepreneurial competencies (concepts, attributes, skills and mind-sets) that can be used by individuals to start and develop "growth-oriented" business ventures. The term growth-orientated highlights the point that being an entrepreneur is not the same as self-employed, because an entrepreneur aims to employ others as well (Al-Lawati et al. 2022).

#### The role of entrepreneurship education in stimulating entrepreneurial intention

Hoang et al. (2021) state that entrepreneurship is a process involving the discovery, evaluation and exploitation of opportunities to introduce new products or processes, access to new markets and raw materials through organising efforts that previously have not existed. Joensuu-Salo, Viljamaa and Varamäki (2021) defined entrepreneurial intention as a self-acknowledged conviction by a person that they intend to set up a new business venture and consciously plan to do so at some point in the future. Furthermore, Fayolle and Gailly (2008: 578) mention that intentions are usually defined as one's desire to own one's own venture or to start a business. Previous studies have indicated that en-trepreneurial intention is a strong predictor of planned behavior (Ajzen 1991 and Breva and Galindo 2020).

Malebana (2012: 34) postulates that entrepreneurial intention should be linked to employability in small and medium enterprises to provide a justification that is more than merely economical. Universities have been regarded as a source of technological development that is useful to entrepreneurial activity (Ghafar 2020; Ncube and Lekhanya 2021). Various paths to achieving business ownership are related to the background characteristics, motivations, attitudes, and employment history of owner-managers, as well as the support they receive and the processes they employ to start a new business (Armuna et al. 2020: 75). Liu et al. (2020) state that entrepreneurship involves three components: a new idea located in an entrepreneurial opportunity; its implementation into an enterprise; and the market's acceptance of the product. Understanding the link between ideas and action is critical for understanding the entrepreneurial process (Bird 1988). However, Joensuu-Salo,

Viljamaa and Varamäki (2021) state that an individual cannot engage with an entrepreneurial opportunity without an intention to do so. Entrepreneurial intention is a representation of a future course of action (Hoang et al. 2021). Rodriguez-Lopez (2021) mention that it is not simply an expectation or prediction of future actions but a proactive commitment. Intentionality is a state of mind directing a person's attention, experience and actions toward a specific object (goal) or path (Joensuu-Salo, Viljamaa and Varamäki 2021). Moreover, Ajzen (2020) indicate that intention is the most immediate antecedent of a given behaviour.

Hoang et al. (2021) report that entrepreneurs who establish businesses differ considerably from those who are promoted or hired. Moreover, those who inherit or purchase a firm fall between these two (2) extremes. On the basis of this observation, Bell and Bell (2020) define three (3) types of intention to create a business; classical entrepreneurial intention (i.e., the intention to continue operating an inherited or acquired firm), and intrapreneurial intention (i.e., the intention to be an intrapreneur or cor-porate entrepreneur). These three (3) types of intention suggest that learning goals and professional needs differ amongst entrepreneurs. Even though some entrepreneurial ideas begin with inspiration, intention is required for sustained attention and action (Fayolle and Gailly 2008). Entrepreneurs' intentions guide their goal setting, communication, commitment, organisation and other kinds of work and effort in the entrepreneurial process.

### Teachable entrepreneurial competencies

Bolzani and Luppi (2020) noted entrepreneurship competencies are underlying characteristics, such as generic and specific knowledge, motives, traits, and self-images, as well as social roles, and skills that result in venture birth, sur-vival, and/or growth. Entrepreneurship competencies are linked with the entrepreneurs' ability to be innovative, crea-tivity, able to identify opportunities, identify strengths and weaknesses (Multan 2020). Bolzani and Luppi (2020) pos-tulated that entrepreneurship competencies combine creativity, a sense of initiative, problem-solving, the ability to marshal resources, and financial and technological knowledge. Souto and Rodriguez-Lopez (2021) state that entrepre-neurship competencies enable entrepreneurs and entrepreneurial employees to provoke and adapt to change. Ferreras-Garcia et al. (2019) described entrepreneurship competencies as the total ability of an entrepreneur to perform their role successfully. Competencies are a collection of attributes suitable or fit for purpose in fulfilling a particular task (Stuss et al. 2019). Ferreras-Garcia et al. (2019) recommend entrepreneurship competencies be measured using individual level competencies, which can be classified into four categories, namely; personal and relationship, business and management, human relations, and entrepreneurial competencies.

- Personal and relationship competencies denote to the ability to negotiate with others, preserve a good personal network of work contacts, and developing long-term, credulous and devoted relationships with others (Armuna et al. 2020).
- Business and management competencies comprise numerous business tasks, such as managing of finance, budgeting, business operations, as well as business planning (Amini, Arasti and Bagheri 2018).
- Human relations competencies refer to the grouping of human relations functions and its management in the business. It embraces staff development, hiring of new staff members, leadership and motivating staff (Amini, Arasti and Bagheri 2018)
- Entrepreneurial competencies are associated with the entrepreneur's ability to be innovative, creative, and able to identify opportunities strengths and weaknesses (Silveyra, Herrero and Pérez 2021).

Entrepreneurial competencies contribute significantly to any firm's performance and growth (Bolzani and Luppi 2020). Students must be equipped with strong entrepreneurial competencies for both local and global firms to compete successfully. Entrepreneurial competencies are carried out by individuals, who begin and grow their ventures. In order for entrepreneurs to survive and be successful in today's competitive and rapidly

changing environment, entrepreneurs need to continuously improve their entrepreneurial competencies (Ferreras-Garcia et al. 2019).

Armuna et al. (2020: 74) suggested that, "entrepreneurial competencies are considered a higher-level characteristic encompassing personality traits, skills and knowledge, and therefore can be seen as the total ability of the entrepreneur to perform a job role successfully". In a review of literature, Zizile and Tendai (2018) identified various categories of competencies as entrepreneurial competencies. These were innovative skills, risk taking, idea generation, and envisioning opportunities, along with creativity.

#### Theory of planned behaviour and entrepreneurship education

The theory of planned behaviour (TPB) is used to understand behaviour that is, to some degree, under volitional control (Ajzen 2020). Intention, in turn, is shaped by attitudes, subjective norms, and perceived behavioural control (Breva and Galindo 2020). The TPB starts with an explicit definition of the behaviour of interest in terms of target, the action involved, the context in which it occurs, and the time frame. The central tenet of this theory is the individual intention to perform a particular behaviour (Ajzen 2020). Intention, in turn, is shaped by attitude towards behaviour, subjective norms, and perceived behavioural control (Joensuu-Salo, Viljamaa and Varamäki 2021).

- Attitude towards behaviour: Al-Lawati et al. (2022) described this as the extent of a person's favourable or unfavourable perception of a particular behaviour. Thus, when new issues arise requiring a judgement of some sort, people tend to draw on stored information (beliefs), each of which carries evaluative implications.
- Subjective norms: This refers to the perceived social pressure to act out the behaviour or not, or normative beliefs related to whether significant individuals or groups approve or disapprove of a given behaviour (Ajzen 2020). Therefore, this normative belief will influence an individual's intention to perform a particular behaviour.
- Perceived behavioural control: Liu et al. (2020) state this is the perceived ease or difficulty of performing a behaviour and relates to the non-volitional elements inherent, at least potentially, in all behaviours. An increase of perceived behavioural control increases the perception of opportunity. Control factors include required skills and abilities; availability or lack of time, money, and other resources; as well as cooperation by other people; and so forth. A control belief is defined as a person's subjective probability that a given facilitating or inhibiting factor will be present in the situation of interest (Ajzen 2020).

The notion of perceived behavioural control is similar to that of perceived self-efficacy (Aji et al. 2019). Perceived self-efficacy is the belief an individual has regarding their ability to control their own level of functioning and events that affect their lives (Ncube 2016; Aji et al. 2019). The difference between these two concepts is that perceived behavioural control is concerned with the ability to accomplish a particular behaviour, while perceived self-efficacy is concerned with control over the behaviour itself, not the outcomes or actions (Jordaan 2014). The presence of an entrepreneurial role model can influence the degree of self-efficacy of an individual, which can then increase intentions of behaviour (Al-Lawati et al. 2022). Research indicates perceptions regarding the desirability and feasibility of entrepreneurial behaviour can be influenced by education and training (Souto and Rodriguez-Lopez 2021). Aji et al. (2019) stated perceived self-efficacy/control for entrepreneurial behaviours is influenced by the acquisition of management skills and exposure to entrepreneurial situations. Thus, an education programme can influence the antecedents of intention as identified by the TPB (Ferreras-Garcia et al. 2019).

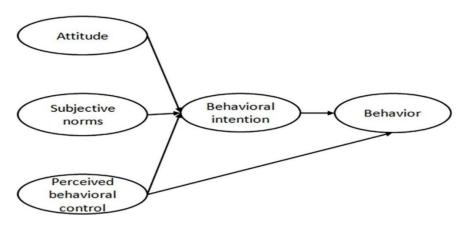
Hoang et al. (2021) concur education plays a role in shaping people's behaviour, even though some successful entre-preneurs did not further their education. It is well-observed that many entrepreneurs have been greatly influenced by their education and established successful entrepreneurial ventures. Therefore, the importance of education, in general, and entrepreneurship education, in particular, should be realised, as it helps individuals develop great ideas, execute them and launch and grow business ventures. An educational setting appears to be productive for development of perceived self-efficacy through mentorship by successful entrepreneurs, evaluation of work in and out of class, and peer evaluation (Bratianu et al. 2020). All these

elements can contribute to how an individual sees themselves and their belief in their ability to become an effective entrepreneur.

The motivation for behaviour selection (the decision to behave or act in a certain way) is determined by the desirability of the outcome (the expected result of that selected behaviour) (Prabandari and Sholihah 2015). Thus, Expectancy Theory provides a framework for understanding why and how people choose to be entrepreneurs. An individual's motivation to become self-employed is based on the subjective probability that his or her efforts will be followed by a specific outcome and the attractiveness of that outcome. Fayolle and Gailly (2008: 578) verified that the attraction of being self-employed for a given person depends on his/her perception it will lead to desirable outcomes. In the body of theory that studies the role of motivation in the formation of entrepreneurial intentions, one avenue of research uses self-determination theory to explain the motivational processes involved in entrepreneurial behaviour. Self-determination theory posits that people tend to move toward activities that satisfy their inner resources of development and optimal functioning (Breva and Galindo 2020).

Entrepreneurship education and training play an important role in developing entrepreneurial self-efficacy (ESE), ac-cording to Aji et al. (2019). The term self-efficacy refers to the internal belief of an individual concerning their ability to follow through on the type of behaviour needed to carry out a particular performance (Jordaan 2014). Thus, self-efficacy affects the degree to which a person is able to become aware of opportunities in the environment and act on them. Therefore, education regarding self-efficacy is important in entrepreneurship education (Fayolle and Gailly 2008; Akinbami 2015). Hoang et al. (2021) confirm entrepreneurial education and training is effective in ESE and in forming the intention to start a new business enterprise. Robb, Valerio and Parton (2014) also found that developing students' self-confidence, along with their general knowledge and self-efficacy, ensured entrepreneurship education can increase student perceptions of the possibility of pursuing an entrepreneurial career. Self-efficacy develops over time, as entrepreneurs reflect on and learn from their experience (Aji et al. 2019). Consequently, entrepreneurship training must focus both on technical knowledge and on developing the self-confidence of potential entrepreneurs, which will develop entrepreneurship intention.

Ajzen (2002) and Aji et al. (2015) presented five studies explicitly designed to investigate the factorial structure of per-ceived behavioural control, in the context of the TPB, which provided consequent support for a distinction between self-efficacy and controllability. Hence, the empirical research provides significant evidence of the distinction between measures of self-efficacy (ease or difficulty of performing a behaviour) and measures of controllability (belief of having control over the behaviour or extent to which performing the behaviour is up to the actor) (Aji et al. 2015).



### FIGURE 1 AN ILLUSTRATION OF AJZEN'S THEORY OF PLANNED BEHAVIOUR (AUTIO ET AL. 2001: 147)

Mothibi and Malebana (2019) indicated one way of understanding the drivers of entrepreneurship, is the use of ap-propriate frameworks. In this regard, the TPB was highly accepted as an extremely effective predictor of a wide range of behaviours, including entrepreneurship (Ajzen 1991; Fatoki 2019). Ajzen (1991) noted the TPB contends that entre-preneurial intention implies the effort the person will make to start a new business venture and therefore, captures the motivational factors that influence this type of behaviour. The three motivational factors include attitude towards start-up, social norms and perceived behavioural control (Prabandari and Sholihah 2015). Previous studies are pre-dominantly consistent that attitude, subjective norm, and perceived behavioural control have positive impacts on en-trepreneurial intentions. Malebana (2012: 34) averred the TPB has been empirically tested and validated in several studies. Furthermore, the authors noted empirical studies paid more attention to the intention to start a business and the growth decision (Malebana 2012). The numerous scholars and academics, including Krueger, Reilly and Carsrud (2000); Wiklund and Shepherd (2003); Wiklund, Davidsson and Delmar (2003); and Fayolle (2005), applied and used the TPB to guide the intentions to initiate a business endeavour. It is evident from the existing empirical literature that the TPB is the most predominantly used, precisely because it possesses statistical efficacy to predict human behaviour (Breva and Galindo 2020). Furthermore, Al-Lawati et al. (2022) noted the TPB posits that intention is an accurate pre-dictor of planned behaviour, particularly in cases where the behaviour is difficult to observe, rare or involves unpre-dictable time lag.

Within the premise of entrepreneurship, the TPB asserts that entrepreneurial intention is dependent on an individual's attitude toward desirability of entrepreneurial career, subjective norms - including perceived personal expectations and beliefs to perform the behaviour and perceived behavioural control or perceived ability to execute the intended behaviour of entrepreneurial intentions (Breva and Galindo 2020). Internationally, Autio et al. (2001) pointed out that entrepreneurial intentions of university students in numerous countries, such as the United Kingdom, Sweden, Finland, and the United States of America, are expressively influenced by attitude, subjective norm, and planned behavioural control. Autio et al. (2001) reported entrepreneurial intentions of university students are significantly influenced by attitude, subjective norm, and planned behavioural control. Tkachev and Kolveried (1999) established that attitude, subjective norm, and planned behavioural control determined employment status choice of the university students.

#### Personal attitude

Nishimura and Tristán (2011) described attitude as the degree to which a person has a favourable or unfavourable evaluation appraisal of performing the particular behaviour of interest. Similarly, Shah et al. (2020) highlighted attitudes reflect the extent to which an individual has an unfavourable or favourable evaluation of an expected behaviour towards establishing a task. Therefore, personal attitude is determined by the beliefs regarding the outcomes and consequences associated with the behaviour and is indirectly influenced by social norms such as entrepreneurship mindset (Souto and Rodriguez-Lopez 2021). The advancement and introduction of entrepreneurship subjects for all students in Kwa-Zulu Natal (KZN) universities are anticipated to have a positive attributional and attitudinal change towards entrepreneurship. The aspirations cut across the theoretical and practical domain of the syllabus and content. Therefore, this is how the perceived attitudes towards the behaviour factor of the theory would be located in the current study. In the entrepreneurship education context, attitude toward venture start-up is the degree to which a university student holds a positive or negative personal valuation with regard to being an entrepreneur, whilst attitude toward self-employment has

been defined as the difference between perceptions of personal desirability in becoming your own boss and being employed by a certain organisation. Consequently, it can be concluded that the personal attitude has a significant influence on entrepreneurial intention.

Guay, Roy and Valois (2017) and Breva and Galindo (2020) found attitude has a positive and significant influence on the intention of entrepreneurship. This study emphasises attitude toward behaviour as a predictor of intention, because it focuses on assessing the attitudes and development of a positive mindset that entrepreneurship could be a career option for students. Kamau-Maina (2007: 17) conducted a study on the impact prior exposure to entrepreneurship and beliefs about formal learning and careers has on intentions and actual establishment of the venture in Kenya. The results indicated entrepreneurial intentions and actual business setup were strongly determined by attitudes towards entrepreneurship (Kamau-Maina 2007: 42). This implies a positive attitude towards entrepreneurship will strengthen an individual's intention to open an entrepreneurial enterprise, even when the possible behaviour might be remote, as is the case with university students (Bo 2017; Roy et al. 2017; Sadat and Lin 2020).

#### Subjective norm

Ajzen (1991) indicated the subjective norm refers to the individual's perception of social pressure to perform the be-haviour under consideration or not. It is, therefore, correct to state that social pressure can influence the extent to which an individual forms an intention to behave in a positive manner. For instance, where the TPB is concerned, subjective norms comprise two elements, which are normative beliefs, (the perception regarding family and friends' expectations) and motivation (the need to comply with what people expect) (Fatoki 2019). In the context of the current study, the final year students enrolled in the faculty of Business and Administration within KZN institutions depend on their superiors and guardians for financial and moral support, with lecturers, role models and friends inspiring innovative ideas. However, their intentions to be involved in entrepreneurial activities are widely influenced by people in close proximity. This is the extent to which the subjective norm element/factor of the theory thus fits within the current study.

Sadat and Lin (2020) argued subjective norms reflect the perceptions an individual has in relation to the values con-tained in their immediate environment, which may include the moral values of their group. Therefore, subjective norms can have a direct influence on the formation of an entrepreneurial intention (Souto and Rodriguez-Lopez 2021). This study concluded that subjective norms have significant influence on entrepreneurial intention.

### Perceived behavioural controlc

Rodriguez-Lopez (2021) and Shiri et al. (2017) indicated perceived behavioural control refers to the individual's per-ceptions regarding their ability to perform a particular behaviour and is an exogenous variable that influences both intention and behaviour. Additionally, Ajzen (2020) defined perceived behavioural control as a person's perception of the ease or difficulty of performing the behaviour of interest. It has two constituting elements, namely self-efficacy and perceived controllability. Self-efficacy encompasses internal control factors such as knowledge and skills and reflects one's perception on the subject of the ease or difficulty of undertaking a specific behaviour, as well as one's confidence in the ability to perform the behaviour (Breva and Galindo 2020). While the nature of perceived behavioural control may differ depending on the context, for the purposes of this current study, perceived behavioural control is applied as the degree to which an individual believes they can leverage the human, social, and financial resources necessary to start an entrepreneurial enterprise, and as such, the perceived difficulty or ease of doing so (Ajzen 1991; Souto and Rodriguez-Lopez 2021). As a result, there is a need to equip students in the faculty of Business and Administration with the subjects of entrepreneurship that consist of related courses in management. The extent to which the students are taught about the general aspects of business administration will determine whether they possess the ability and

capacity to venture into entrepreneurship (Dzomonda and Fatoki 2019). In view of the aforegoing, the perceived feasibility or self-efficacy factor of TPB is applicable to the current study. Entrepreneurship behaviour can be influenced by the entrepreneur's aspirations, instead of a set of inflexible strategic goals. For that reason, it can be concluded the perceived behavioural control has a significant influence on entrepreneurial intention.

By inference, it is thus possible the educated entrepreneur's expectations are more realistic and ambitious than those of other entrepreneurs. Behaviour associated with entrepreneurship is a major contributor to surviving external changes (Rodriguez-Lopez 2021). It also has the decisive impact of achieving competitive advantages (Fatoki 2019). Resultantly, encouraging entrepreneurial behaviour has become a major aim in entrepreneurship. It is the degree of preparedness, knowledge in business, and skills in running the firm. Respondent perceptions may vary from the strength of their knowledge to the totality of the entire business process. There may be a lower mean in perceived behavioural control, however, it does not affect the idea of a moderate level of perception (Breva and Galindo 2020). Overall, the TPB is a useful framework to juxtapose the influence of attitude on entrepreneurship (Liu et al. 2020). Consequently, this research study sought to analyse the contribution of entrepreneurship in developing entrepreneurship competences contained in the TPB (personal attitude, subjective norms and perceived behavioural control) on the intention to become an entrepreneur.

### 4. METHODOLOGY

Public universities in the province of KZN (Durban University of Technology, Mangosuthu University of Technology, University of Zululand and University of Kwa-Zulu Natal), Faculty/ School of Business and Administration, served as the study area. The reason for selecting these universities is the majority of graduates struggle to find employment immediately after completing their degree.

### 4.1 Study design, approach and population

A comprehensive literature review on entrepreneurship education was conducted. Furthermore, a quantitative research approach was used for the empirical research. A non-probability purposive technique was used to select final year university students. Four universities were selected based on accessibility and cost-effectiveness. Final year students from the Faculty / School of Business and Administration were requested to participate in the survey. These students were selected, because they were deemed more mature and could, therefore, make informed judgements whether they perceive entrepreneurship education effective or not. Final year students possess a broad spectrum of intentions and attitudes towards entrepreneurship. For that reason, level of education can be employed to develop a student's entrepreneurial profile. Furthermore, the group is homogeneous and the information could lead to universities preparing students for entrepreneurial ventures through development or curricular changes.

Non-probability purposive sampling was used to recruit the study sample from four universities selected, based on accessibility and cost-effectiveness, from a sampling frame of 26 public universities in the nine provinces of SA. A total of 256 final year university students were invited to participate in the study. Ultimately, a total of 136 (84%) eligible questionnaires were used in the final analysis. A questionnaire was developed to investigate university student per-ceptions in terms of effectiveness of entrepreneurship education. Items were drawn from previous similar studies. Section A of the questionnaire requested demographic information of students, while Section B comprised items in-vestigating the perceptions of students regarding entrepreneurship education effectiveness. The items in Section B were scored on a 6-point Likert type scale, ranging from 1 (strongly disagree) to 6 (strongly agree). Cronbach's alpha was used to test the reliability of the scales. Coefficient Cronbach alpha values were computed for the construct of intention for self-employment. A coefficient value of 0.60 is regarded as acceptable (Furuya-Kanamori, Barendregt and Doi 2018).

#### 5. RESULTS

#### 5.1 Factor analysis

Table 1. KMO and Bartlett's Test

		Kaiser-Meyer-Olkin	Bartlett's Test of Sphericity		
		Measure of Sampling Adequacy.	Approx. Chi-Square	df	Sig.
B1	Entrepreneurship Education Curriculum promotes Business Start-Up	0.652	213.938	28	0.000
B2	Perceptions of Students About the Benefits of Entrepreneurship education	0.821	225.601	28	0.000
В3	Graduate Attributes and Skills Needed in Entrepreneurship Education	0.695	203.653	21	0.000
B4	The Role of Public Institutions in Promoting Entrepreneurship education	0.918	649.026	28	0.000

All conditions were satisfied for factor analysis, in other words, the Kaiser-Meyer-Olkin (KMO) Measure of sampling adequacy value should be greater than 0.500 and the Bartlett's Test of Sphericity sig. value should be less than 0.05.

Table 2. Investigating the key competences that entrepreneurship education promotes

		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Chi Square
	]	Row N %	Row N %	Row N %	Row N %	Row N %	p-value
Entrepreneurship education equips students to think strategically		29.9%	55.2%	13.8%	1.1%	0.0%	0.000
The institution provides students with internship opportunities in businesses in the local economy, which teach them business competences		22.8%	37.5%	19.9%	9.6%	10.3%	0.000
Entrepreneurship education imparts the competences to take calculated risks		19.1%	49.3%	23.5%	7.4%	0.7%	0.000
Entrepreneurship education can play a crucial role in gaining the necessary competences to manage a business and change the views of South Africans towards self-employment		35.3%	42.6%	17.6%	2.9%	1.5%	0.000
Entrepreneurship education teaches that social interaction is an important competence for a successful entrepreneur		40.4%	41.2%	15.4%	2.2%	0.7%	0.000

From Table 2 it can be observed that 85.1% of respondents agreed with the statement that entrepreneurship education teaches students to think strategically (strongly agreed 29.9%; agreed 55.2%), while 13.8% remained neutral, and 1.1% disagreed. With regard to the statement, the Chi-square Test revealed a significant relationship at p < 0.05 ( $\chi$ 2=105.985; df=4) in the scoring pattern of respondents by group. The results concur with Ghina (2014), moreover, many empirical studies reveal a negative relationship between entrepreneurship education and its effectiveness. Some scholars found entrepreneurship is a talent. However, Jardim, Bártolo and Pinho (2021) stated that:

"...effectiveness of the entrepreneurship education is mainly due to the quality of the design of the programmes themselves, proven, for example, by their pedagogical approach, such as teaching methods,

excellence of the fa-cilitator, and activities carried out; by the predispositions of the participants (that is, if they started working on entrepreneurial skills since childhood), it becomes much more natural to be an entrepreneur; and by their inte-gration or not in entrepreneurial ecosystems, verifying that whoever was born and lived in an entrepreneurial family or regional ecosystem more easily takes chances to innovate".

The results reveal entrepreneurship education plays a crucial role in gaining the necessary entrepreneurship competences to manage a business and change the views of South Africans towards self-employment with the statement. It can be seen the majority of respondents, at 77.9%, agreed with the statement, 17.6% were neutral, and 4.4% disagreed (agree = 2.9%; strongly disagree = 1.5%). Regarding the role entrepreneurship education plays in students gaining necessary entrepreneurship competences, the Chi-square test shows p < 0.05 ( $\chi$ 2=94.294; df=4) in the scoring pattern of respondents. In the same vein, 81.6% of respondents agreed (40.4% strongly agree; 41.2% agree) with the statement that entrepreneurship education teaches that social interaction is an important competence for a successful entrepreneur, while 15.4% were neutral, and 2.9% disagreed (2.2% disagree; 0.7% strongly disagree). Only 60.3% of respondents agreed (strongly agreed 22.8%; agreed 37.5%). Furthermore, the Chi-square analyses ( $\chi$ 107.088; df= 4) revealed a significant difference at p < 0.05.

Only 60.3% of respondents agreed (strongly agreed 22.8%; agreed 37.5%) with regard to the statement that the institution provides students with internship opportunities in businesses in the local economy, which teaches them business competences, while 19.9% were neutral, and 19.9% disagreed (disagree= 9.6%; strongly disagree 10.3%). The Chi-square test is significant at p < 0.05, with a Chi-square value of  $\chi 2=35.176$  and a degree of freedom of df=4.

Table 3. Assessment whether an entrepreneurship education curriculum promotes business start-up

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Chi Square
	Row N %	Row N %	Row N %	Row N %	Row N %	p-value
The higher the level of education of an individual the greater the possibility of them starting a venture that progresses past the start-up stage	34.6%	32.4%	16.9%	12.5%	3.7%	0.000
The entrepreneurship programmes offered by the institution have practical elements that are devised to encourage the creation of new businesses	22.8%	39.0%	24.3%	4.4%	9.6%	0.000
An effective entrepreneurship education curriculum allows people to access the relevant knowledge and gain practical skills needed to start an entrepreneurial venture	41.9%	41.2%	14.0%	0.7%	2.2%	0.000
Entrepreneurship education seeks to prepare students to be responsible, enterprising individuals who are able to take risks and create new businesses	40.4%	45.6%	11.0%	2.2%	0.7%	0.000

It can be observed that 67% of respondents agreed with the statement (strongly agreed = 34.6%; agreed = 32.4%) that the higher the level of education of an individual offers a greater possibility they will start a venture that progresses past the start-up stage, 16.9% were neutral, and 16.2% disagreed. With regard to the statement, the Chi-square test showed a significant difference (p < 0.05) in the scoring patterns of the respondents by age ( $\chi$ 2=47.382; df=4).

As depicted in Table 3, it can be observed that 83.1% of respondents were in agreement that an effective entrepreneur-ship education curriculum allows people to access the relevant knowledge and gain practical skills needed to start an entrepreneurial venture (strongly agreed 41.9%; agreed 41.2%), 14.0% were neutral, and 2.9% disagreed (disagree= 0.7%; strongly disagree 2.2%). The Chi-square test was significant at p < 0.05, with a Chi-square value of  $\chi 2 = 112.382$  and a degree of freedom of df=4.

A total of 86% (40.4% strongly agree; 45.6% agree) of the respondents indicated entrepreneurship education seeks to prepare students to be responsible, enterprising individuals, able to take risks and create new businesses, 11.0% were neutral, and 2.9% disagreed. Furthermore, the Chi-square analyses ( $\chi$ 125.176; df= 4) revealed a significant difference at p < 0.05. Given the previous results, it is interesting to see the analysis results of the entrepreneurship programmes offered by the universities involved in this study. A total of 61.8% of respondents agreed (strongly agreed 22.8%; agreed 39.0%) that entrepreneurship programmes offered by the institution have practical elements, devised to encourage the creation of new businesses, while 24.3% were neutral, and 14% percent disagreed with the statement (disagree= 4.4%; strongly disagree 9.6%). The Chi-square test is significant at p < 0.05, with a Chi-square value of  $\chi$ 2=50.176 and a degree of freedom of df=4.

The following patterns were observed:

- All statements show statistically significant high levels of agreement with the statements.; and
- There are no statements with high levels of disagreement.

#### 6. DISCUSSION

In SA, government-funded educational institutions (public institutions of learning), include entrepreneurship education as part of the strategy to address the lack of employment since the current, Black government took over. Nonetheless, the subject is explicitly recognised only in the later years of secondary education and then, in tertiary education, as part of the subject basic principles of management and business administration. In the curriculum of universities in SA, there are no courses directly related to entrepreneurship, only some references through other, related subjects. The findings indicate entrepreneurship is integrated into the curriculum as an element. Since some activities can be carried out to fulfil the requirement set out in the curriculum, the evaluation of measures that may promote entrepreneurship effectiveness is a matter of high motivation in both teachers and students. Answering the question of what role entrepreneurship education play in gaining entrepreneurship competences, it can be seen students felt confident when rating their management competences, as 77% of respondents rated it very high. Students are shown to rate the competences acquired during entrepreneurship education positively, both as regards perception and attainment. Hence, attitude toward entrepreneurship, subjective norm and perceived behavioural control mediates the latter relationship between entrepreneurship competences and venture start-ups. The results showed participation in entrepreneurship education teaches students entrepreneurship competences concerned with fostering attitude towards selfemployment, subjective norm, perceived behavioural control and intention towards self-employment were increased and are a greater perceived control than non-participants. Consequently, the results revealed management competences have a high level of attainment and perception, although, in reality, student perceptions are higher than the actual entrepreneurship education effectiveness, since they tend to overrate the accomplishments of management competence acquisition.

The study confirms management competences in entrepreneurship education play a crucial role in the effectiveness of entrepreneurship education. The results of the study found students rate the management competences acquired in entrepreneurship education in government funded universities positively, both as regards perception and the attain-ment. Allowing students to take part in business activities on campus has a positive impact on the effectiveness of entrepreneurship education and attainment of entrepreneurship competences. In conclusion, it can be said social in-teraction and internship programmes also have a big part in making entrepreneurship education effective, in addition to helping students attain much needed

entrepreneurship competences when starting their own business. With regard to the business start-up, it seems allowing students to start their small businesses on campus plays a big role in ensuring entrepreneurship effectiveness. The results showed participation in entrepreneurship education activities is more likely to have a higher attitude towards entrepreneurship, subjective norms, and perceived behavioural control than non-participants in entrepreneurship education. Small business is the portal through which many people enter the economic mainstream. Business ownership allows individuals, including women and minorities, to achieve financial success, as well as pride in their accomplishments. Student start-ups are a significant part of overall university entrepreneurship. It can be seen that entrepreneurship competence has a positive influence on the likelihood of the effectiveness of entrepreneurship education through the venture creation process, and the effect should be greatest when entrepreneurship students seek to move from thinking about entrepreneurship, to formally starting a business.

### 7. CONCLUSION

The failure rate of business start-up is very high in SA. Starting a business is a stressful job that often comes with emo-tional turbulence, multiple obstacles, and high levels of uncertainty concerning outcomes. Small business owners op-erate in a difficult and constantly changing business environment. Entrepreneurship competence is an important per-sonal characteristic and may help drive business success, nonetheless, entrepreneurship education effectiveness is not only concerned with the number of successful business start-ups achieved by student entrepreneurs but also at indi-vidual level. The purpose of the study was to examine the contribution of entrepreneurship education in developing entrepreneurship competencies and stimulating entrepreneurial intentions among South African students. The results indicated entrepreneurship education curricula in universities have a positive impact on developing entrepreneurship competences in students. Based on the findings of this research, it can be concluded that entrepreneurship education has a positive impact on entrepreneurship competences needed for business start-up and growth. The research findings can be helpful to nascent entrepreneurs, SME owners, entrepreneurship researchers, and government in SA. Fur-thermore, the findings could also aid institutions of learning to develop strategies to improve entrepreneurship educa-tion effectiveness by sending students to entrepreneurship training and seminars to cultivate entrepreneurial mindset in them. The findings of the study could, furthermore, also assist the South African government to understand how entrepreneurship curricula affect the effectiveness of entrepreneurship education in these universities. Therefore, this can assist the government funded universities in designing training programmes on how to improve the entrepre-neurship competences of nascent entrepreneurs.

### 8. RECOMMENDED INTERVENTION STRATEGIES FOR ENTREPRENEURSHIP EDUCATION

It is recommended students be inducted into the workings of the business world, as this will make them sensitive to real-world business challenges, setbacks and rewards. A significant number of students may then become inspired to start their own businesses and take calculated risks. Student experiences in an entrepreneurship course (particularly in business plan simulation) and involvement in business competitions can equip them with the necessary confidence to perform well in presentations to promote or market their businesses. In addition, these activities can inspire students to become effective social entrepreneurs as well. It is also recommended both students and staff be exposed to international competitions to become fully aware of the requirements to win international competitions in the future.

#### 9. SUGGESTION FOR FUTURE RESEARCH

In light of the study findings, many interventions and effective policies are needed to boost entrepreneurship education in South African government funded universities. However, the following suggestions for further research would help gain an even more comprehensive understanding of the issues

enabling further specific recommendations, not only to cultivate entrepreneurial mind-sets in students but also to create positive ripple effects on developing entrepreneurial competencies, knowledge, and skills, which are transferable and beneficial in starting a business. This research has generated many questions in need of further investigation. What is now needed is a cross-national, comparative study with a developed country that offers entrepreneurship education. Moreover, South African universities must improve the integration and inclusion of entrepreneurship education curricula that universities try to promote. It is suggested successful strategies for entrepreneurship education in developed countries that are possible in a South African context should be examined.

#### 10. IMPLICATIONS PRACTICALLY

The study provides valuable information and insight for those who formulate, teach and evaluate entrepreneurship education programmes to increase the entrepreneurship competence on students. Findings of the study suggest that participation in entrepreneurship education activity can positively influence students' subjective norms and PBC, con-forming that universities can shape and foster entrepreneurial abilities and subjective norms through EEPs.

### 11. LIMITATIONS

The current study has several limitations that provide future research opportunities. We did not have control groups to compare with our treatment groups; therefore, we are unable to determine the exact impact of EEPs on students' EI. Although we can assume that these significant pre-test post-test differences are the results of participating in EEPs because the contents of EEPs are very specific and not duplicated in other courses, however, the availability of a control group would have strengthened our findings. Reliance solely on self-report measures presents another limitation. Future research should include what other than self-reports to assess the impact of EEPs on EI and its predictors. Finally, future research should focus on the intention-behaviour relationship. This link has been studied even less than the one between antecedent attitudes and EI. Therefore, the longitudinal study is recommended for future research, as it can capture the changes of entrepreneurial attitudes and intention over time and the subsequent formation of entre-preneurial behaviour from intention.

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