

| Volume 3 | Issue 1 | February (2023) | DOI: 10.47540/ijias.v3i1.664 | Page: 1 – 11 |
|----------|---------|-----------------|------------------------------|--------------|
|----------|---------|-----------------|------------------------------|--------------|

The Effect of Entrepreneurial Education Program on Entrepreneurial Self-Efficacy in Some Selected South Africa's Universities: Students' Perception

EM. Rankhumise¹, ME. Letsoalo²

¹Departments of Management and Entrepreneurship, Tshwane University of Technology, South Africa

²Centre for Academic Excellence, University of Limpopo, South Africa

Corresponding Author: EM. Rankhumise; Email: rankhumiseEM@tut.ac.za

| ARTICLEINFO | ABSTRACT |
|---|--|
| <i>Keywords</i> : Entrepreneurial Education, Entrepreneurial Self-efficacy, Student Perception. | Entrepreneurship can greatly contribute to economic growth and graduate employment. Many university graduates may find that becoming an entrepreneur is the solution to their recruitment issues. This exploratory cross-sectional quantitative study at the Tshwane University of Technology and Walter Sisulu University aims |
| Received: 15 September 2022Revised: 08 February 2023Accepted: 13 February 2023 | to learn about entrepreneurship education students' perceptions of the impact of the curriculum on their capacity to interact with the business sector. A total of 484 students (279 TUT and 205 WSU) volunteered to participate. The results indicated that students at both universities valued the universities' intervention through the entrepreneurial education program. It was also discovered that entrepreneurship education continues to play a significant part in the lives of all motivated business students. The delivery of entrepreneurship education should be enhanced to ensure that the students benefit and have the propensity to start their businesses. In so doing, less unemployment of graduates would be experienced. Further studies should be conducted in a broader scope by embarking on other universities beyond the current ones surveyed to enable the findings to be generalized. |

INTRODUCTION

The Covid-19 epidemic has had an impact on South Africa and the rest of the world, both in terms of work and education, as well as entrepreneurship, which is regarded as one of the economy's productive factors for development (Torres-Coronas & Vidal-Blasco, 2019). Due to the annual influx of workers, employment possibilities are imbalanced. Without adequate management, this situation may worsen, putting the country's economy under strain Entrepreneurship's (Adelaja, 2021). growing importance, as well as its ability to contribute to economic growth and job prospects, has prompted institutions all over the world to offer entrepreneurship education courses. As a result of universities' interest in entrepreneurship education, a growing number of students are enrolling in entrepreneurship courses intending to start a business during and/or after the course. The inclusion of entrepreneurial studies into university curricula is increasingly being introduced into

business programs, mostly at the undergraduate level (Allaher & Brathwaite, 2017).

Kalyoncuogluet al., (2017) explained that Entrepreneurship education (EE) and teaching methods or strategies have the possibility of influencing students' entrepreneurial propensity. The desire to start a business to make money may be referred to as the desire to become an entrepreneur, and it can be a significant predictor of behavior (Ajzen & Sheikh, 2013). However, it is expected that by participating in a structured entrepreneurial education program, students are likely to gain the knowledge and skills necessary to address the obstacles and risks that come with starting a business (Kalyoncuoglu, Aydintan, & Göksel, 2017). Studies have shown that many countries have taken into account the necessity for self-employment and as such have integrated entrepreneurship education curricula to stimulate enterprise culture and eventually enterprising economies (Supramaniam & Arumugam, 2012). The

delivery of entrepreneurship curricula at universities worldwide has prompted challenges for universities more specifically academics and program developers. Notably, all these efforts are intended to assist the students to be self-employed rather than job seekers whereby solely depend on governments to provide jobs.

Self-efficacy is developed by targeted education, such as entrepreneurship education that includes entrepreneurship and entrepreneurial skills. Bandura (1997) defines self-confidence as the ability to complete specified activities successfully based on four factors: master experiences, modeling, social persuasion, and physiological state judgments. Entrepreneurial intentions, on the other to be antecedents of hand, are thought entrepreneurial action. Researchers must have a thorough understanding of the factors that may exploring impact the intents of those entrepreneurship for the first time to pave the way for the effective development of entrepreneurship theory. Many scholars, including Nian, Bakar, and Islam (2014); Keat, Selvarajah, and Meyer(2011); and Othman and Othman (2017), believe that some personal characteristics, backgrounds, experiences, and dispositions influence one's ability to become an entrepreneur.

The ability of the generation born after World War II (The baby-Boomers generation) relied more on the government and large organizations to provide professional opportunities and prosperity is not available anymore to graduates (Warhuus & Basaiawmoit, 2014). Working for yourself (selfemployment) or others (i.e., being employed by other organizations) are the two career options or possibilities faced by students at tertiary institutions and graduates around the world. This is the real issue that university and college students and graduates are confronted with. Students must evaluate what they want to accomplish after their time in academic institutions in this situation.

Entrepreneurship begins with a concept, according to a future entrepreneur such as a university student. According to Molaei, Zali, Moboraki, and Farsi (2014), the entrepreneurial process involves a variety of practices, for instance, determining the feasibility of a business idea, understanding calculated risks, and ensuring that the envisaged business idea is viable. Entrepreneurial intention, on the other hand, defines a major drive that plays a critical part in the process of transforming the feasibility of the business idea and market to sustainable profitability.

Entrepreneurship as a career path is seen as a way to address socio-economic issues inter alia with; economic growth, job creation, and the wellness of the community. Given the importance of strides made in the aforesaid factors, the contribution made by universities to the well-being of society is becoming highly visible (Mustafa, Hernandez, Mahon, & Chee, 2016). When it comes to entrepreneurial traits and inclinations among university students, tertiary institutions, especially universities, are typically the initial point of contact (Fayolle & Linan, "The future of research on entrepreneurial intentions", 2014). Entrepreneurship education, which refers to "any pedagogy or process of education for entrepreneurial attitudes and abilities", is the most typical method for academic institutions to raise students' entrepreneurial awareness (Fayolle, Gailly, & Lassas-Clerc, 2006). Azis, Haeruddin, and Azis (2018)define education 'as an organized course delivered at the higher education level that contributes to the development of students' entrepreneurial attitudes, abilities, and intentions to start new companies. Arguably, one of the most significant goals of universities is to develop competencies in students so that they can start enterprises while pursuing their degrees and after they graduate. One of the aims of entrepreneurship education programs, according to. Molaei et al., (2014), posit that EE programs aim to establish and reinforce entrepreneurial intention among potential entrepreneurs, particularly students. Notably, universities have focused on encouraging students and graduates to be entrepreneurial and in this regard, a student's knowledge of entrepreneurial self-efficacy is enhanced. To succeed in this endeavor, academic institutions must build a conducive climate that will allow for successful entrepreneurship education. However, it is common knowledge that entrepreneurship education programs or interventions are one of the most effective ways of enhancing individuals' knowledge, skills, and attitudes toward entrepreneurial self-efficacy. As a result of this, the students who undergo entrepreneurship education are likely going to start businesses.

Academic institutions, according to Mustafa et al. (2016), can support students' entrepreneurial intentions (EIs) by fostering an environment favorable to entrepreneurship in addition to providing educational support. According to Rankhumise (2014), entrepreneurship education is viewed as a technique to improve students' entrepreneurial efficacy through business-related activities. To attain this critical goal, universities should provide entrepreneurial interventions that are relevant, practical, and able to raise entrepreneurial self-efficacy.

Universities throughout the world are instilling a culture of entrepreneurial orientation in their different curricula. The essence in this instance is to foster entrepreneurial self-efficacy among the students. Universities worked tirelessly to embrace entrepreneurship education as a way to provide educational support to students by creating building blocks. This is one way to learn more about identifying business ideas, starting a business, and managing a business venture. As a result, the goal of this research is to determine if entrepreneurship education has an impact on students' inclinations to pursue entrepreneurship as a career.

Higher Education Institutions have prioritized entrepreneurship education as a way to instill ESE among students. They prioritize this intervention due to the notion that it contributes to economic development and employment creation. As a result, entrepreneurship education is imminent in the development of citizens or communities. On this basis, as highlighted by Dutta, Li, and Merenda (2011), it is notable that entrepreneurship direct role in steering and fostering students to become entrepreneurs soon. This might provide students with the requisite knowledge, skills, and capabilities required to launch and operate a new business. Worldwide students taking entrepreneurship in the program mix, but the ability to improve entrepreneurial value through conventional teaching techniques remains unclear, necessitating further discussion on this topic (Nian, Bakar, & Islam, 2014).

Although many academics feel that entrepreneurship is something that can be taught, what remains questionable is its effectiveness in inculcating self-efficacy among students. According to Nian et al., (2014), the teaching approach for entrepreneurship education, as well as the student's learning styles, are critical in determining the effectiveness of entrepreneurship education. Scholars maintain that not all students follow the same teaching process; rather, different individuals have varied learning styles, which educators should consider when teaching. In this instance, it can be argued that the effectiveness of learning methods differs from student to student, therefore the outcome of one teaching style or strategy will never be the same for all students.

METHODS

The study adopted a comparative crosssectional quantitative which followed the ex-postfacto design (Struwig & Stead, 2013; Creswell & Creswell, 2017). In this study, a structured questionnaire was used to collect data among the students in the selected universities. Students' opinions about self-confidence were assessed using visual-analogue scaled items (Struwig & Stead, 2013). To express the participant's opinion, analogue scale items ranged from 0 (strongly disagree) to 10 (strongly agree). Data were analyzed using Stata Release 15. In ensuring the normality of the data, the Shapiro-Wilk test was computed (Ghasemi & Zahediasl, 2012).

The statistical analysis was carried out at two levels: namely descriptive and inferential statistics. Descriptive statistics were computed in the form of frequencies and percentages, and as percentiles and interquartile ranges for measured observations. The Wilcoxon-Mann-Whitney test, as highlighted in Bergmann, Ludbrook, and Spooren (2000), was used to test whether the observations of the samples WSU and TUT were drawn from the same or identical population (de Winter & Dodou, 2010). In other words, The Wilcoxon-Mann-Whitney test was used to compare the perceptions of the study arms. The Wilcoxon-Mann-Whitney test is a nonparametric analogue to the independent samples ttest. The results were interpreted at a 0.05 error rate. In other words, the findings were declared significant if the observed p-value was less than 0.05. Thematic items were labeled b1, b2, and up to b20 (see Table 1).

RESULTS AND DISCUSSION

The primary objective of this study was to explore students' perceptions of entrepreneurial education in enhancing self-confidence to start business ventures at the two selected universities. This study included 484 students (279 [57.64%] TUT and 205 [42.36%] WSU) who volunteered to participate. The leading question was "How is the effect of the academic program regarding your selfconfidence?".

Table 1 below depicts the results of the internal consistency. To test the internal consistency, Cronbach's alpha with a cut-off point of 0.7 was used. The data collection instrument included 20 items that assessed students' perceptions of entrepreneurship education, all of which were reliable (Cronbach's alpha = 0.9515).

| Item | Obs | sign | Item-test correlation | Item-rest correlation | Average Interitem correlation | Alpha |
|--|-----|------|-----------------------|-----------------------|-------------------------------------|--------|
| Entrepreneurship education increases my understanding of generating innovative ideas (b1) | 406 | + | 0.7353 | 0.7009 | 0.4943 | 0.9489 |
| Entrepreneurship education increases my understanding of an entrepreneurial environment (b2) | 406 | + | 0.7659 | 0.7348 | 0.4917 | 0.9484 |
| Entrepreneurship education increases my understanding of financial provisions for entrepreneurship (b3) | 406 | + | 0.6986 | 0.6604 | 0.4974 | 0.9495 |
| Entrepreneurship education increases my understanding of business planning (b4) | 406 | + | 0.7580 | 0.7261 | 0.4924 | 0.9485 |
| Entrepreneurship education increases my understanding of marketing research for entrepreneurship (b5) | 406 | + | 0.7287 | 0.6936 | 0.4948 | 0.9490 |
| Entrepreneurship education increases my understanding of the attitude of entrepreneurs (b6) | 406 | + | 0.7180 | 0.6818 | 0.4957 | 0.9492 |
| Entrepreneurship education increases my understanding of the importance of entrepreneurship in society and individuals (b7) | 406 | + | 0.7308 | 0.6959 | 0.4947 | 0.9490 |
| Entrepreneurship education enhances my understanding of the characteristics of entrepreneurs (b8) | 406 | + | 0.7316 | 0.6968 | 0.4946 | 0.9490 |
| Entrepreneurship education inspires the belief that entrepreneurship is possible for me (b9) | 406 | + | 0.7207 | 0.6848 | 0.4955 | 0.9491 |
| Entrepreneurship education increases my understanding of the motives involved in entrepreneurial activities (b10) | 406 | + | 0.7806 | 0.7512 | 0.4905 | 0.9482 |
| Entrepreneurship education increases my understanding to build a network (b11) | 406 | + | 0.5716 | 0.5221 | 0.5081 | 0.9515 |
| A creative entrepreneurship education inspires my entrepreneurial mindset (b12) | 406 | + | 0.7198 | 0.6838 | 0.4956 | 0.9492 |
| The lecturer inspires my entrepreneurial mindset (b13) | 406 | + | 0.6724 | 0.6317 | 0.4996 | 0.9499 |
| Guest speakers inspire my entrepreneurial mindset (b14) | 406 | + | 0.5837 | 0.5352 | 0.5071 | 0.9513 |

Table 1. Test for Internal Consistency

| Indonesian Jour | nal of Innovatio | n and Applied | Sciences (IJIAS) | , 3 (1 |), 1-11 |
|-----------------|------------------|---------------|------------------|--------|---------|
|-----------------|------------------|---------------|------------------|--------|---------|

| Successful local entrepreneur stories inspire my entrepreneurial thinking (b15) | 406 | + | 0.7322 | 0.6975 | 0.4945 | 0.9490 |
|--|-----|---|--------|--------|--------|--------|
| Entrepreneurship education increases my | | | | | | |
| knowledge of how to develop a business | 406 | + | 0.7792 | 0.7496 | 0.4906 | 0.9482 |
| plan (b16) | | | | | | |
| Entrepreneurship education increases my | 406 | + | 0.7708 | 0.7403 | 0.4913 | 0.9483 |
| ability to manage business projects (b17) | 406 | Ŧ | 0.7708 | 0.7403 | 0.4915 | 0.9485 |
| 18. Entrepreneurship education increases | | | | | | |
| my ability to handle risks and | 406 | + | 0.7581 | 0.7261 | 0.4924 | 0.9485 |
| unpredictability (b18) | | | | | | |
| Entrepreneurship education increases my | 406 | + | 0.7009 | 0.6629 | 0.4972 | 0.9495 |
| ability to distribute provisions (b19) | 400 | | 0.7009 | 0.0029 | 0.4972 | 0.9495 |
| Entrepreneurship education improves my | 100 | | 0 7747 | 0.7446 | 0.4010 | 0.0492 |
| overall entrepreneurial skills (b20) | 406 | + | 0.7747 | 0.7446 | 0.4910 | 0.9483 |
| Test Scale | | | | | 0.4954 | 0.9515 |
| · · · · · · · · · · · · · · · · · · · | | | | | | |

Source: Authors' construction

The Shapiro-Wilks test was used to test whether the data were normally distributed. Because all p-values were less than 0.05, Table 2 indicates that the data were not normally distributed. As a result, the use of non-parametric data analysis methods was justified to analyse the data.

| Item | Obs | W | V | Ζ | Prob>z |
|------|-----|---------|--------|-------|---------|
| b1 | 470 | 0.90643 | 29.770 | 8.135 | < 0.001 |
| b2 | 470 | 0.90785 | 29.318 | 8.098 | < 0.001 |
| b3 | 469 | 0.94010 | 19.022 | 7.060 | < 0.001 |
| b4 | 448 | 0.90410 | 29.226 | 8.073 | < 0.001 |
| b5 | 472 | 0.94497 | 17.575 | 6.873 | < 0.001 |
| b6 | 469 | 0.90595 | 29.866 | 8.142 | < 0.001 |
| b7 | 471 | 0.92578 | 23.658 | 7.585 | < 0.001 |
| b8 | 471 | 0.90826 | 29.245 | 8.093 | < 0.001 |
| b9 | 469 | 0.89813 | 32.350 | 8.333 | < 0.001 |
| b10 | 469 | 0.93730 | 19.911 | 7.170 | < 0.001 |
| b11 | 468 | 0.96050 | 12.520 | 6.057 | < 0.001 |
| b12 | 462 | 0.92887 | 22.285 | 7.435 | < 0.001 |
| b13 | 468 | 0.94800 | 16.482 | 6.716 | < 0.001 |
| b14 | 467 | 0.94839 | 16.327 | 6.693 | < 0.001 |
| b15 | 467 | 0.92387 | 24.083 | 7.624 | < 0.001 |
| b16 | 468 | 0.91755 | 26.132 | 7.821 | < 0.001 |
| b17 | 470 | 0.92865 | 22.701 | 7.485 | < 0.001 |
| b18 | 467 | 0.93351 | 21.034 | 7.300 | < 0.001 |
| b19 | 469 | 0.94655 | 16.975 | 6.787 | < 0.001 |
| b20 | 468 | 0.91366 | 27.367 | 7.931 | < 0.001 |

Table 2. Shapiro-Wilk Test for Normal Data

Source: Authors' construction

In all items, the ranges of the middle 50% of the observations were all 3 (interquartile range [IQR] = 3), as shown in Table 3. The exceptions were items b2, b6, and b7, which had IQRs of 2.5, b13 and b14, which had an IQR of 4, and item b11, which had an IQR of 3.5. As a result, the observations for b13 and b14 were more spread-out than other items' observations (see Table 3). All of the items had medians [P50] of at least 7.5 (or 75%), indicating that the participants agreed with the statements posed by all of the items. Table 3 depicts the summary statistics.

| 1 4010 5. | Sammary | 11100000100 | | |
|-----------|---------|-------------|-----|------|
| Item | P25 | P50 | P75 | *IQR |
| b1 | 6.5 | 8.5 | 9.5 | 3.0 |
| b2 | 7.0 | 8.5 | 9.5 | 2.5 |
| b3 | 6.5 | 8.0 | 9.5 | 3.0 |
| b4 | 7.0 | 8.5 | 10 | 3.0 |
| b5 | 6.5 | 8.0 | 9.5 | 3.0 |
| b6 | 7.0 | 8.5 | 9.5 | 2.5 |
| b7 | 7.0 | 8.5 | 9.5 | 2.5 |
| b8 | 7.0 | 9.0 | 10 | 3.0 |
| b9 | 7.0 | 8.5 | 10 | 3.0 |
| b10 | 6.5 | 8.0 | 9.5 | 3.0 |
| b11 | 5.5 | 7.5 | 9.0 | 3.5 |
| b12 | 6.5 | 8.5 | 9.5 | 3.0 |
| b13 | 5.5 | 7.5 | 9.5 | 4.0 |
| b14 | 5.5 | 7.5 | 9.5 | 4.0 |
| b15 | 6.5 | 8.5 | 9.5 | 3.0 |
| b16 | 6.5 | 8.5 | 9.5 | 3.0 |
| b17 | 6.5 | 8.0 | 9.5 | 3.0 |
| b18 | 6.5 | 8.0 | 9.5 | 3.0 |
| b19 | 6.0 | 7.5 | 9.0 | 3.0 |
| b20 | 6.5 | 8.5 | 9.5 | 3.0 |

Table 3. Summary Measures

*IQR = P75 – P25 is interquartile range, where P25 and P75 are the 25^{th} and 75^{th} percentiles, respectively.

Source: Authors' construction

Table 4 shows the results of the test, which show that the two study arms were not significantly different (since all p-values were not less than 0.05). It also demonstrates that the TUT students consistently gave higher ratings to the items than the WSU students. While all of the items were agreed upon by the students, TUT students were slightly more in agreement than WSU students since their rank-sums were higher.

Table 4. Insignificant differences between TUT and WSU students

| Item | Ran | Rank-Sum | | |
|------|---------|----------|---------|--|
| | TUT | WSU | P-Value | |
| b7 | 63044.5 | 48111.5 | 0.4276 | |
| b9 | 61127 | 48088 | 0.0737 | |
| b11 | 65983 | 43763 | 0.0910 | |
| b12 | 63406 | 43547 | 0.4203 | |
| b14 | 63193 | 46083 | 0.8775 | |
| b15 | 61520 | 47758 | 0.1358 | |

Source: Authors' construction

Table 5 shows items where students from the two institutions differed significantly (p-values less

than 0.05). On 16 items, there were substantial disparities. TUT's rank-sums were higher than WSU's, meaning that TUT students agreed with the statements substantially more than WSU students did.

Table 5. Significant differences between TUT and WSU students

| Item | Rank | -Sum | P-Value |
|--------|---------|---------|----------|
| Itelli | TUT | WSU | r-value |
| b1 | 57445 | 53240 | < 0.0001 |
| b2 | 59951 | 50734 | 0.0119 |
| b3 | 57341 | 52874 | < 0.0001 |
| b4 | 55665.5 | 44910.5 | 0.0112 |
| b5 | 60840 | 50788 | 0.0166 |
| b6 | 59364 | 50851 | 0.0015 |
| b8 | 59794.5 | 51361.5 | 0.0039 |
| b10 | 59569 | 50646 | 0.0026 |
| b13 | 56052.5 | 53693.5 | < 0.0001 |
| b16 | 59853.5 | 49892.5 | 0.0156 |
| b17 | 59913 | 50772 | 0.0042 |
| b18 | 58429.5 | 50848.5 | 0.0016 |
| b19 | 58019.5 | 52195.5 | 0.0001 |
| b20 | 60143 | 49603 | 0.0271 |

Entrepreneurship education

Kabongo and Okpara (2010) indicate that the study relating to entrepreneurship courses in universities is the most interesting and challenging area of research. This initiative by universities is done to expose students to career opportunities in business when they complete their studies and even while they are pursuing their studies. Othman and Othman (2017) explain that entrepreneurial education courses are steadily increasingly preparing students with the relevant knowledge and skills that would assist them to follow entrepreneurship as a career. In this instance, university programs are a good way to introduce entrepreneurial skills to students. Entrepreneurial activities, according to Kabongo and Okpara (2010), should include 'skill-building courses, leadership, new product development, creative thinking, and student exposure to technological innovation'. The attributes are directed at aspiring entrepreneurs and students who are more likely to succeed in their commercial endeavors. According to Co and Mitchell (2006), entrepreneurial education focuses more on the construction and

transfer of knowledge relating to the subject content. Education for entrepreneurship focuses more on current and future entrepreneurs to develop and stimulate the entrepreneurial process, as well as demonstrating an enabling environment by giving all of the required resources for a new enterprise to get off the ground. This is concerned with the learning experience as well as the development of competencies, skills, and aptitudes among the students (Co & Mitchell, 2006).

It is often assumed that entrepreneurship, or at least certain aspects of it, can be taught and that it is not confined to individuals who are born with certain abilities, characteristics, or attributes (Bell, 2015). As a result, educators have the opportunity to adopt a variety of methodologies and strategies to serve the learning objectives and needs of their students. Entrepreneurship education should not be confined to the courses presented but should be supplemented by extramural activities, and entrepreneurship can be learned through experience in this regard (Jami & Gökdeniz, 2020). Students in developing emerging countries requested or universities provide required to networks, workshops, and projects focusing on entrepreneurship, according to Davey, Plewa, and Struwig (2011). According to Mwasalwiba(2010), entrepreneurship programs and faculties are expected to be part of social support initiatives that could assist indigenous businesses to develop and grow. Universities should deploy outreach programs aimed at supporting aspiring entrepreneurs in starting and managing their enterprises in this area. Universities may use students who are enrolled in entrepreneurship courses to carry out outreach programs so that they can gain practical experience in the corporate world (Zegeye & Singh, 2019).

According to Nian, et al. (2014),entrepreneurial education aims to provide students with entrepreneurial knowledge, skills, and capacities to help them pursue jobs as entrepreneurs. As a result, the goal of entrepreneurship education is to teach students how to develop unique entrepreneurial abilities and seize opportunities to be successful in their respective businesses. Universities, according to Ghina (2014), develop entrepreneurship programs to prepare students to start, plan, and manage a real business. Moberg (2014), explains that the basic notion of entrepreneurship education and entrepreneurial pedagogy is to focus on what motivates and interests the students the most and in itself will be the foundation for their learning process. Ghina (2014) also claims that entrepreneurship education is being implemented in universities to instill entrepreneurial culture and self-efficacy in students. Once this is operationalized, it could assist in developing well-rounded entrepreneurs with entrepreneurial self-efficacy (ESE). Having developed these entrepreneurs are likely to start enterprises and they could have the prospects of creating employment and contributing to economic growth. When an individual is planning, starting, or running a business, entrepreneurial efficacy emerges and gets embedded in them. As a result, an efficacious person has a goal in mind. This agrees with Bandura (1986), who argued that efficacy is tied to a person's capacity to carry out plans to attain their objectives. This is in keeping with Sofia and Sanjaya's (2021) assertion that a higher level of entrepreneurial efficacy boosts a person's chances of success. Specifically, it sharpens skills, inspires confidence, and increases their enthusiasm to succeed (Timotius, 2022). Running a business with a variety of risks is difficult, and an entrepreneur must have self-efficacy to succeed. Therefore, efficacy may aid entrepreneurs in decision-making amid uncertainty.

According to Do Paco et al. (2015), entrepreneurship education programs focus on connecting entrepreneurship to new venture creation, business management, and entrepreneurial skills and ultimately teaching students about entrepreneurship and enterprise rather than preparing them for it. The emphasis should be on developing students' skills, attributes, and behavior in this regard.

Siddiqui and Alarafi (2019), argue that for entrepreneurship education to be more effective, educators must have the self-confidence to teach the subject and the course should equip students with all knowledge and skills required to establish a business, *inter alia* with; opportunity identification skills, creativity skills, venture start-up skills, and environment assessment skills. Self-efficacy is critical for improving educators' effectiveness in teaching entrepreneurship, as well as stimulating students' ambitions and encouraging them to become future successful business owners (Pihie & Bagheri, 2011).

The importance of entrepreneurship education

Because it can add to the wealth of entrepreneurs, entrepreneurship is recognized as the most important component in improving a country's economy (Nian, Bakar, & Islam, 2014). Many countries are supporting and appreciate the relevance of entrepreneurship education since it may offer job opportunities and enhance economic growth if properly nurtured (Lekoko, Rankhumise, & Ras, 2012; Othman & Othman, 2017). Because effective entrepreneurship may create jobs, reduce unemployment, and generate economic spin-offs, many governments are encouraging and recognizing the value of entrepreneurship education. Entrepreneurship education is critical because it aims to prepare students to be successful in their respective careers when they start a new company endeavor. This notion backs up what researchers have discovered in their research: universities play a critical role in leveraging the talents of students and graduates because they are conceived as a societal innovation system and entrepreneurship education that aims to produce entrepreneurially oriented and competent individuals.

Co and Mitchell (2006) argue that universities play an important part in developing how they teach entrepreneurship and this can assist to create a more entrepreneurial disposition among young people, for instance, students by instilling an explicit understanding of risks and rewards, teaching opportunity seeking and recognition of skills. Sánchez (2010) explains that education seems an imperative way of stimulating entrepreneurship for various reasons inter alia with (i) education provides individuals with a sense of independence, autonomy, and self-confidence. (ii) Education makes people aware of alternative career choices. (iii) education makes people perceive opportunities and it provides knowledge that can be used to create new ventures. The argument by Sánchez aligns with Iwu, et al., (2020) who found that participants associated entrepreneurship with creating a business participated in entrepreneurship when they education. Through entrepreneurship education, individuals can acquire the necessary skills and knowledge to develop new businesses.

The effectiveness of entrepreneurship education

Improving entrepreneurial self-efficacy requires the effective implementation of entrepreneurship education courses. Modules offered in the entrepreneurship education program, according to Fayolle et al (2006), are targeted at creating knowledge and abilities that will enable both the trainer and the trainee to achieve effective performance, particularly while attempting to pursue a business venture (Hosseinzadeh, Razavi and Hosseinzadeh, 2014). In other words, a welldelivered entrepreneurship education program should enable the students to acquire the necessary skills required to be able to start new businesses (Hosseinzadeh, Razavi, & Hosseinzadeh, 2014).

ESE is about having the confidence, willingness, and perseverance to overcome the early uneasiness that a new start-up process delivers. The effectiveness of entrepreneurial education among students from various countries has been studied (Lekoko, Rankhumise, & Ras, 2012; Othman & Othman, 2017; Cheng, Chan, & Mahmood, 2009). Regardless of whether or not their programs are successful, these studies can give institutions and governments an indication of the effects of exposing entrepreneurship education. Cheng et al., (2009) discovered that entrepreneurship education programs in Malaysian universities failed to match the expected acquisition of entrepreneurial abilities with the actual acquisition of entrepreneurial skills. This result indicated that entrepreneurship education had minimal impact on building an entrepreneurial mentality among students in the programs.

Other researchers reported favorable outcomes in addition to the negative findings reported by, among others, Cheng et al. (2009).Entrepreneurship education, according to Dutta et al. (2011) and Nian et al. (2014), stimulates students to start start-ups or new business ventures. Based on the mixed results, it is worth noting that the introduction of entrepreneurial education at universities across the world has yielded both positive and bad results. This research was necessary to determine the students' perceptions of entrepreneurship education at the two South African institutions. The goal of this study was to find out how public university students' perceptions of entrepreneurship education in terms of developing entrepreneurial self-efficacy.

CONCLUSION

Although the students from the two universities had some major disparities in some items, the overall impression was that they all agreed with the statements asked in the data collection instrument. The result indicated that the TUT students, in particular, agreed with the statements more than their WSU counterparts.

The students believed that entrepreneurship education empowered them to start a business, understand the business environment, increase their abilities to manage business projects, increase their knowledge to develop business plans, increase their abilities to deal with risk and unpredictability, increase their understanding of the importance of entrepreneurship in society and individuals, and increase their unpredictability tolerance. It is suggested that the delivery of entrepreneurship education should be enhanced to ensure that the students benefit and have the propensity to start their businesses. In so doing, less unemployment among graduates would be experienced particularly in developing countries such as South Africa.

REFERENCES

- Adelaja, A. A. (2021). Entrepreneurial education exposure: a comparative investigation between technical and nontechnical higher education. *Journal of Small Business and Enterprise Development, 28*(5), 711-723.
- Ajzen, I., & Sheikh, S. (2013). Action versus inaction: Anticipated affect in the theory of planned behavior. *Journal of Applied Social Psychology*, 43(1), 155-162.
- Allaher, H., & Brathwaite, C. (2017). Entrepreneurship education for executive MBAs: The case of Caribbean business school. *Industry and Higher Education*, 3(5), 305-317.
- Azis, M., Haeruddin, M. I., & Azis, F. (2018). Entrepreneurship education and career intention: the perks of being a woman student. *Journal of Entrepreneurship Education*, 21(1), 1-10.
- Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal* of Social and Clinical Psychology, 4(3), 359-373.

- 6. Bandura, A. (1997). *Self-efficacy: The exercise* of control. New York: Freeman.
- Bell, R. (2015). Developing the next generation of entrepreneurs: Giving students the opportunity to gain experience and thrive. *The International Journal of Management Education, 13*(1), 37-47.
- Bergmann, R., Ludbrook, J., & Spooren, W. P. (2000). Different outcomes of the Wilcoxon-Mann-Whitney test from different statistics packages. *The American Statistician*, 54(1), 72-77.
- Cheng, Y. M., Chan, W. S., & Mahmood, A. (2009). The effectiveness of Entrepreneurship education in Malaysia. *Education + Training*, 51(7), 555-566.
- Co, M. J., & Mitchell, B. (2006). Entrepreneurship education in South Africa: nationwide survey. *Education and Training*, 48(5), 348-359.
- 11. Creswell, J., & Creswell, J. D. (2017). Research design: Qualitative, quantitative, and mixed methods approaches. Sage publications.
- Davey, T., Plewa, C., & Struwig, M. (2011). Entrepreneurship perceptions and career intentions of international students. *Education* + *Training*, 53(5), 335-352.
- 13. de Winter, J. F., & Dodou, D. (2010). Fivepoint likert items: t test versus Mann-Whitney-Wilcoxon. *Practical Assessment, Research, and Evaluation, 15*(11), 1-16.
- Do Paco, A., Ferreira, J. M., Raposo, M., Rodrigues, R. G., & Dinis, A. (2015). Entrepreneurial intentions: is education enough? *International Entrepreneurship Management Journal*, 11(1), 57-75.
- Dutta, D. K., LI, J., & Merenda, M. (2011). Fostering entrepreneurship: impact of specialization and diversity in education. *International Entrepreneurship Management Journal*, 7, 163-179.
- Fayolle, A., & Linan, F. (2014). "The future of research on entrepreneurial intentions". *Journal* of Business Research, 67(5), 663-666.
- Fayolle, A., Gailly, B., & Lassas-Clerc, N. (2006). Assessing the impact of entrepreneurial education. *Journal of European Industrial Training*, 20(9), 701-720.

- Ghasemi, A., & Zahediasl, S. (2012). Normality tests for statistical analysis: a guide for nonstatisticians. *International Journal of Endocrinology and Metabolism*, 10(2), 486-489.
- Ghina, A. (2014). Effectiveness of Entrepreneurship education in higher education institutions. *Procedia: Social and Behavioural Sciences*, 115(1), 332-345.
- Hosseinzadeh, M., Razavi, S. M., & Hosseinzadeh, D. (2014). Evaluating the effectiveness of entrepreneurship training courses in a developing country. *Journal of Entrepreneurship, Business and Economics*, 2(1), 63-73.
- Iwu, C., Muresherwa, G., Nchu, R., & Eresia-Eke, C. (2020). University students' perception of entrepreneurship as a career option. *Academia: Publication of the Higher Education Policy, 1*(1), 177-201.
- Jami, M. Y., & Gökdeniz, I. (2020). The role of universities in the development of entrepreneurship. *Entrepreneurship Education*, 16(1), 85-94.
- Kabongo, J. D., & Okpara, J. O. (2010). Entrepreneurship education in sub-Saharan African universities. *International Journal of Entrepreneurial Behaviour and Research*, 16(4), 296-308.
- Kalyoncuoglu, S., Aydintan, B., & Göksel, A. (2017). The effect of entrepreneurship education on entrepreneurial intention: An experimental study on undergraduate business students. *Journal of Management Research*, 9(3), 72-90.
- 25. Keat, O. Y., Selvarajah, C., & Meyer, D. (2011). Inclination towards entrepreneurship among university students: an empirical study of Malaysian university students. *International Journal of Business and Social Science*, 2(4), 206-220.
- Laukkanen, M. (2000). Exploring alternative approaches in high-level entrepreneurship education: creating micro mechanisms for endogenous regional growth. *Journal of Entrepreneurship and Regional Development*, 12(1), 25-47.
- 27. Lekoko, M., Rankhumise, E. M., & Ras, P. (2012). The effectiveness of entrepreneurship

Education: what matters most? *African Journal* of *Business Management*, 6(5), 12023-12033.

- 28. Moberg, K. (2014). Two approaches to entrepreneurship education: The different effects of education for and through entrepreneurship at the lower secondary level. *The international journal of Management Education, 12*(3), 512-528.
- Molaei, R., Zali, M., Mobaraki, M., & Farsi, J. Y. (2014). The impact of entrepreneurial ideas and cognitive style on students' entrepreneurial intention. *Journal of Entrepreneurship in Emerging Economies*, 6(2), 140-162.
- 30. Mustafa, J. M., Hernandez, E., Mahon, C., & Chee, L. K. (2016). Entrepreneurial intentions of university students in an emerging economy: the influence of university support and proactive personality on students' entrepreneurial intentions. *Journal of Entrepreneurship in Emerging Economies*, 8(2), 162-179.
- Mwasalwiba, E. S. (2010). Entrepreneurship education: a review of its objectives, teaching methods and impact indicators. *Education* + *Training*, 52(1), 20-47.
- 32. Nian, T. Y., Bakar, R., & Islam, A. (2014). Students' perceptions on entrepreneurship education: the case of Universiti Malaysia Perlis. *International Education Studies*, 7(10), 40-49.
- Othman, N. B., & Othman, S. H. (2017). The perceptions of public university students of entrepreneurship education in Malaysia. *International Business Management*, 11(4), 865-873.
- Othman, N. B., & Othman, S. H. (2017). The perceptions of public university students of entrepreneurship education in Malaysia. *International Business Management*, 11(4), 865-873.
- 35. Pihie, Z. A., & Bagheri, A. (2011). Teachers' entrepreneurial self-efficacy: Implication for effective teaching practices. *Procedia-Social* and Behavioural Science, 29(1), 1071-1080.
- 36. Rankhumise, E. M. (2014). Entrepreneurial intentions among students: a case of Tshwane University of Technology, South Africa. *Problems and Perspectives in Management*, 12(2), 105-111.

- Sánchez, J. C. (2010). University training for entrepreneurial competencies: Its impact on intention of venture creation. *International Entrepreneurship and Management Journal*, 7(2), 239 -254.
- Siddiqui, K., & Alarafi, A. (2019). What they don't teach at entrepreneurship institutions? : An assessment of 220 entrepreneurship undergraduate programs. *Journal of Entrepreneurship Education*, 22(6), 1-16.
- Sofia, A., & Sanjaya, E. L. (2021). Entrepreneurial self-efficacy, perceived family support, and entrepreneurial intention on university students. *Psibernetika*, 14(1), 49-57.
- 40. Struwig, F., & Stead, G. D. (2013). *Planning, Designing & Reporting.* Cape Town: Pearson Education South.
- Supramaniam, K., & Arumugam, N. (2012). Entrepreneurship education: Insights into students' learning experience. *Asian Journal of University Education*, 8(2), 19-34.
- Timotius, E. (2022). The Future of entrepreneurship in Indonesia: Fostering the millennials' entrepreneurial intention. *Indonesian Journal of Business and Entrepreneurship (IJBE)*, 8(1), 12-23.
- Torres-Coronas, T., & Vidal-Blasco, M. A. (2019). The importance of perceived behavioral control as a determining element of entrepreneurial intention among university students. *Revista Universidad y Empresa*, 21(37), 108-135.
- 44. Warhuus, J. P., & Basaiawmoit, R. V. (2014). Entrepreneurship education at Nordic technical higher education institutions: comparing and contrasting program designs and content. *The International Journal of Management and Management Education*, *12*, 317-332.
- Zegeye, B., & Singh, M. (2019). The state of entrepreneurship education in higher education institutions of Africa. *Global Journal of Management and Business Research*, 19(6), 26-34.