

The Influence of Entrepreneurial Education on Individual Entrepreneurial Orientation of University Students: A Systematic Review

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ABSTRACT

Purpose: The level of entrepreneurship in a country is an important determinant of economic growth and success. However, it is essential to ensure that individuals are gaining the necessary knowledge and skills to choose an entrepreneurial career upon completion of their studies.

Design/methodology/approach: A qualitative research approach was employed by systematically reviewing approaches to entrepreneurial education and their effect on an individual's entrepreneurial orientation. Data were analysed by means of thematic content analysis. Articles were identified in prominent databases according to a set of inclusion and exclusion criteria.

Findings: The findings were grouped into six themes: The importance of the practical nature of entrepreneurial education; the impact of entrepreneurial education on the economy; entrepreneurial education approaches; the importance of individual entrepreneurial orientation; common individual entrepreneurial orientation factors and the interchangeability of individual entrepreneurial orientation, intrapreneurial orientation, and entrepreneurial attitude orientation. The findings of the systematic review indicate that there is a gap in the current body of knowledge, and the value of the study lies in the fact that many studies have explored the influence of entrepreneurial education on the intention of students, but very few have analysed this influence based on a student's individual entrepreneurial orientation. Furthermore, findings also reveal that current entrepreneurial education approaches employ theory-based teaching but do not place enough emphasis on practice-based teaching. The findings of this study contribute to the existing body of knowledge by investigating the influence that entrepreneurial education has on the individual entrepreneurial education of university students.

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I. INTRODUCTION

Socio-economic ills such as unemployment, poverty, and crime are prominent factors affecting various countries, and emphasis must be placed on how these can be combatted. Entrepreneurship is one solution that has been identified in resolving a country's socio-economic ills because it drives economic development (Kareem, n.d.; Sall, 2022). Both emerging and advanced economies are victims of various forms of social challenges, but emerging economies are often affected disproportionately. The unemployment rate in South Africa was at 32.9% as of the third quarter of 2022, which is significantly higher than in previous quarters. This could be attributed to the effects of the COVID-19 pandemic (Statistics South Africa, 2022a).

Education is, however, still found to be the single most crucial factor in driving economic growth and alleviating a country's socio-economic ills (Béal, 2012). Emerging economies often lack the necessary funds to invest in education to foster growth in the economy and are therefore under immense pressure to attempt to invest in their labour force to boost their economic activity (Bamfo et al., 2017). Poor education is the main determinant of poverty in a country, and it is evident that individuals who have higher qualifications are more likely to gain a better level of employment (Mncayi & Dunga, 2016; Shabbir & Jalal, 2018; Wanka & Rena, 2019). However, it is imperative to understand that the economic growth of any country is highly dependent on entrepreneurs and therefore the education that individuals are receiving with regard to becoming an entrepreneur is vital (Kim et al., 2022). In South Africa, the Department of Education provides basic and secondary education to individuals, who then transition into tertiary education should they achieve the required results to gain acceptance and study towards their chosen field of interest (Department of Education, 2022). Tertiary education institutions were of interest in the current study and must strive to enhance the influence that education, more specifically entrepreneurial education (EE), has on individuals; this will ultimately increase the economic growth of a country (Vaicekauskaite & Valackiene, 2018). Various studies have indicated the importance of education in encouraging individuals to pursue an entrepreneurial career as it has been found that graduates are three times more likely to become entrepreneurs if they are exposed to the discipline (Kassean et al., 2015; Vaicekauskaite & Valackiene, 2018). Countries must realise the impact that EE can have on individuals and how this may inherently stimulate further economic growth for the country. The study aimed to systematically review the influence that EE received by university students has on their individual entrepreneurial orientation (IEO). Based on the findings of the systematic review, the paper provides recommendations and guidelines on the importance of EE on the IEO of university students.

A. Theoretical Background

Reviewing the dimensions of IEO and the approaches currently used in EE will allow researchers to assess the best method to properly orientate students to pursue an entrepreneurial career upon completion of their studies. The following sections outline the nature of IEO and the EE currently experienced by university students.

B. Entrepreneurial Orientation and Individual Entrepreneurial Orientation

Entrepreneurial orientation has added to the growth of the body of knowledge surrounding the entrepreneurship discipline and it has been regarded as an organisation's strategic posture (Covin & Miller, 2014). Various authors have contributed to a better understanding of the concept of entrepreneurial orientation (Miller, 1983; Morris & Paul, 1987; Pearce et al., 2010; Zahra & Neubaum, 1999). Lumpkin & Dess (1996:136) are regarded as main contributors and define entrepreneurial orientation as "the processes, practices, and decision-making activities that lead to new entry as well as a propensity to act autonomously, a willingness to innovate and take risks, and a tendency to be aggressive toward competitors and proactive relative to marketplace opportunities". However, researchers began to not only note the importance of understanding how an organisation is entrepreneurial, but also to believe that value could be found in how an individual is entrepreneurial too, as importance should also be given to the individuals possessing entrepreneurial abilities and not solely the level of entrepreneurship that the organisation exhibits. The landmark study by Langkamp Bolton & Lane (2012) saw the introduction of a concept known as individual entrepreneurial orientation (IEO), which shifted the view of entrepreneurship from the organisational level to the individual level (S. Robinson & Hazleton, 2014). (Langkamp Bolton & Lane, 2012:221) define IEO as the personal characteristics or attitudes that a person acquires that would lead them to pursue entrepreneurial activities. Through the study of IEO, it is also essential to note the importance of how the business world can lead to an entrepreneur's success and equally how an individual's contribution will create success for the organisation.

Langkamp Bolton & Lane (2012) developed an instrument to measure the level of entrepreneurial orientation at an individual level. The same entrepreneurial orientation dimensions identified by Lumpkin & Dess (1996) were used to develop an IEO measuring instrument. These dimensions are risk-taking, innovativeness, proactiveness, autonomy, and competitive aggressiveness:

1. Risk-taking is defined as "the degree to which individuals are willing to make large and risk resource commitments – i.e. those which have a reasonable chance of failure" (Miller & Friesen, 1978:923).
2. Innovativeness is defined as the inclination of an individual to pursue creative endeavours while ensuring that the individual experiments with various opportunities (Miller, 1983).
3. Proactiveness is defined as the forward-looking perspective that an individual undertakes innovatively (Lumpkin & Dess, 1996).
4. Autonomy is defined as an individual's ability to assume decisions that are independent and exclude any organisational restrictions (Lumpkin & Dess, 1996).
5. Competitive aggressiveness is defined as an organisation's ability to directly and extensively challenge its competitors to achieve an enhanced position (Lumpkin & Dess, 1996).

At organisational level, all five dimensions are seen to prominently affect the level of entrepreneurship (Lumpkin & Dess, 1996). However, when Langkamp Bolton & Lane (2012) tested the measuring instrument at the individual level of entrepreneurship, they found that only three of the five dimensions had a significant effect, namely risk-taking, innovativeness, and proactiveness. The dimensions of autonomy and competitive aggressiveness did not have a significant effect, but several other studies must be conducted to validate these findings (Ferreira et al., 2017). Thus, for IEO the dimensions of autonomy and competitive aggressiveness were omitted since Langkamp Bolton & Lane (2012) found that individuals will experience higher levels of autonomy and competitive aggressiveness as they develop into adulthood; therefore, younger individuals (students) would not yet possess these dimensions at a distinguishable level. An interesting aspect concerning entrepreneurial orientation surrounds the terms *unidimensional* and *multidimensional* which implies how the five dimensions listed above should exist. Naldi et al. (2007) note that many studies exploring entrepreneurial orientation have examined this concept as a unidimensional concept, indicating that the five dimensions need to be present all together (co-exist). However, Lumpkin & Dess (1996:137) contradict this by speculating that the dimensions of entrepreneurial orientation “may vary independently of each other in a given context”.

C. Entrepreneurial Education

EE has been defined as the learning process a student goes through to develop the necessary skills and abilities to turn creative business ideas into entrepreneurial ventures (Miço & Cungu, 2023; Secundo et al., 2021). According to several authors, EE has been regarded as the formalised teaching that an individual undertakes in terms of business creation (Cho & Lee, 2018; Mani, 2015; Ratten & Jones, 2021). Furthermore, EE ensures that students are focused on fostering innovative ideas and that graduates are prepared to undertake a business venture (Blenker et al., 2014; Hasan et al., 2017). The current teaching pedagogy being applied to EE incorporates and is based upon the theoretical and conceptual understanding of entrepreneurship rather than practice-based teaching (Miço & Cungu, 2023). The challenge is that EE is not mandatory during professional development and is often disregarded when continuous improvements in curriculums are made – suggesting that current EE programmes require attention in relation to new methods of teaching to better equip lecturers with entrepreneurial competencies (Miço & Cungu, 2023; Seikkula-Leino et al., 2010). Educators that are seen to be part of entrepreneurship programmes in higher institutions have disputed the way in which EE should be taught versus the current manner in which it is being taught, noting that entrepreneurship programmes should combine both theory-based and practice-based teaching to ensure that students are exposed to the theoretical underpinnings as well as gain direct experience with the start-up activities (Bauman & Lucy, 2021; Neck, 2014; Yamakawa et al., 2016). Furthermore, EE has also been found to expose students to the importance of business planning as well as provide access to successful practitioners in the field; this assists students in establishing effective coping strategies that would lead to high levels of motivation to start their businesses (Boldureanu et al., 2020)). Education has therefore received a great deal of attention as a spindle in the transformation of civilisation as it acts as an integrative force that binds individuals and the development of a nation (Gautam & Singh, 2015; Kirkley, 2017; Maneejuk & Yamaka, 2021). Many authors have also suggested that entrepreneurship is a means of relieving social pressures (such as poverty and unemployment) in a country and can positively affect an economy’s well-being (Bilan & Apostoaie, 2023; Carree et al., 2002; Kritikos, 2014; Moradi et al., 2020). However, the issue is that many individuals prefer to opt for a corporate working career due to the extensive level of uncertainty and risk associated with entrepreneurship (Liesch et al., 2014). Furthermore, countries are also under strain to identify how effective the EE received by their students is and how this may affect whether students choose to pursue such a career (Fatoki, 2014). Table 1 below contains various definitions by several authors who have defined EE.

Table 1: Definitions of entrepreneurial education

<i>Author</i>	<i>Definition</i>
<i>Jones and English (2004:2)</i>	<i>“... the process of providing individuals with the ability to recognise commercial opportunities and the insight, self-esteem, knowledge, and skills to act on them”</i>
<i>Fayolle et al. (2006:702)</i>	<i>“... any pedagogical program or process of education for entrepreneurial attitudes and skills”</i>
<i>Gautam (2015:24)</i>	<i>“... the process of professional application of knowledge, attitude, skills, and competencies”</i>

Ndofirepi (2020:4) “... the development of attitudes, behaviours, and capacities that can be applied during an individual’s career as an entrepreneur”

Shah et al. (2020:2) “Entrepreneurship education provides students with the motivation, knowledge, and skills that are essential for launching a successful venture”

For purposes of this study, the *intentions* of the students to pursue an entrepreneurial career were not of interest, but rather whether the EE being received is effective in *orientating* the student to consider an entrepreneurial career. Tselepis et al. (2021) conducted a study and proposed a matrix that could be used to guide EE effectively in tertiary institutions. According to this matrix, three EE approaches are learning about entrepreneurship; learning for entrepreneurship, and learning through entrepreneurship:

1. Learning about entrepreneurship: This approach deals with a lecturer utilising theory-based learning to expose students to the theoretical underpinnings and frameworks of entrepreneurship.
2. Learning for entrepreneurship: This approach encompasses the use of action-orientated methods where the relevant teaching is based upon experiential learning and problem-solving instead of theory-based teaching.

Learning through entrepreneurship: This approach uses the notion of ‘out-of-classroom’ teaching by incorporating real-life learning and allowing students to take part in internships and start their entrepreneurial businesses.

II. METHODS

A descriptive research design was adopted through the use of a systematic review of literature, aiming to aggregate the results of existing studies indicating the influence that EE has on the IEO of university students. According to Mallett et al. (2012:445), a systematic review “involves identifying, synthesising and assessing all available evidence, quantitative and/or qualitative, in order to generate a robust, empirically derived answer to a focused research question”. A systematic review approach is therefore regarded as substantially different from traditional or narrative reviews – this is due to the fact that the systematic review approach follows a set of predetermined steps in order to accurately discover studies as well as to provide an exhaustive summary of current literature in a particular field (Sánchez González et al., 2010; Veginadu et al., 2022). A set of inclusion and exclusion criteria was derived before the systematic review was conducted. The inclusion criteria were that studies had to contain the concepts of EE and IEO, involve a student body in a higher education institution, were regarded as full-text articles and were written in English. The studies were excluded from the systematic review if EE and IEO were not considered the main subject and focus, the articles were not full text in nature and were written in a language other than English. Furthermore, the timeframe for the search included all studies until 2022. The researchers believed that IEO is a relatively new concept, and it would be unfavourable if the current study did not include all research on the concept. Additionally, EE included studies until 2022 as, again, the researchers believed it would be beneficial to understand whether there have been adaptations in the teaching methods and the relevance thereof.

A. Research Question

The primary research question underpinning the systematic review was: Does entrepreneurial education influence the individual entrepreneurial orientation of university students? Various keywords were developed in order to answer the research question, namely “individual entrepreneurial orientation”, “entrepreneurial education”, “intrapreneurial orientation”, and “entrepreneurial attitude orientation”. The keywords utilised assisted in the discovery of studies that have explored EE and IEO. The purpose of the study was therefore to understand how EE influences university students to pursue an entrepreneurial career upon completion of their studies.

B. Source and Study Selection*Table 2: Summary of the inclusion criteria*

<i>Phase</i>	<i>Criteria</i>
<i>Primary</i>	<i>Written in English</i>
<i>Screening</i>	<i>Search keywords identified in the title or text of the displayed search result</i>
	<i>Full-text articles</i>
<i>Secondary Screening</i>	<i>A core focus on EE and IEO</i>
	<i>The context of higher education institutions</i>
<i>Final Screening</i>	<i>Criteria used for secondary screening</i>
<i>(full-text analysis for eligibility)</i>	<i>Studies that analysed EE at higher education institutions and entrepreneurship among individuals</i>

A Boolean search was used by employing a set of keywords. The study was divided into three searches. The initial search entailed finding studies that included IEO and EE in the same publication. The subsequent searches then separated these terms and searched them in the databases to gain further insights into these concepts. Following this, searches then explored studies that have investigated IEO and the final search comprised the exploration of studies that included EE. The following are the search strings that were used: (“Individual Entrepreneurial Orientation” OR “Intrapreneurial Orientation” OR “Entrepreneurial Attitude Orientation”) and (“Entrepreneurial Education OR Entrepreneurship Education OR Entrepreneurial* Education”). The databases that were examined were Sabinet Africa Journals, EbscoHost, Emerald Insight, and ProQuest. Due to the wide-ranging nature of each database and its respective journals, the original Boolean search was not able to be used in its original form each time, for each database. Instead, the researcher needed to adapt the Boolean search, where required. The keywords as indicated in the previous section could appear in the article title, text, abstract, or keywords section. The articles which met the inclusion criteria were accepted so that the researcher could fully review the article. The studies that did not meet the requirements of the inclusion criteria or that exhibited elements of the exclusion criteria were removed from the screening process. If an article only had an abstract, it was also removed from further screening as the researcher was not able to accurately analyse the study.

III. RESULTS AND DISCUSSION

The following section provides an overview of the research process that the researcher adopted, as well as a discussion of the findings as per the systematic review.

A. Overview of Research Process

Figure 1 depicts a high-level overview of the process followed in selecting the studies during the systematic review. The figure indicates that approximately 2.5% of the discovered studies were suitable for inclusion in the process of evaluation.

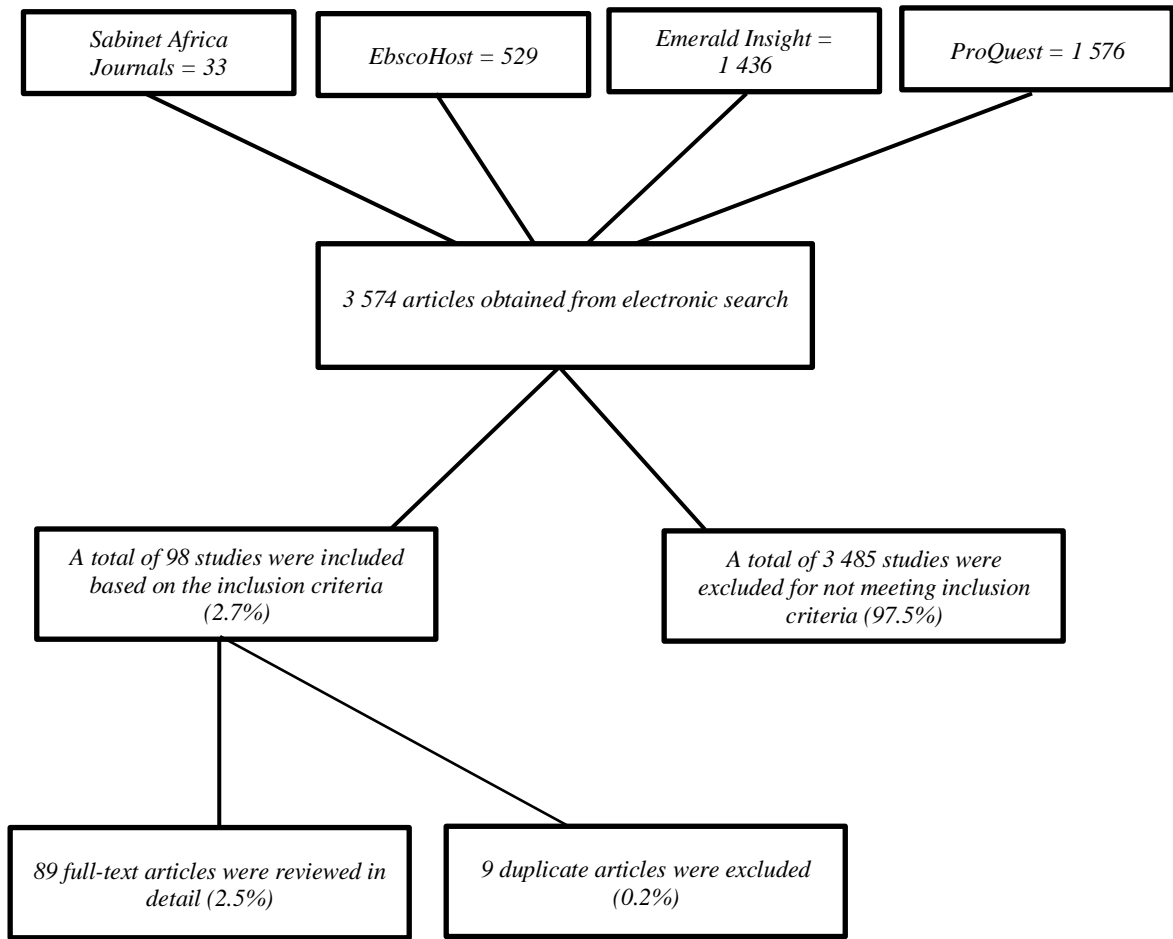


Figure 1: Process of the systematic review study selection

The initial search of the databases yielded 3 574 studies. These studies were then considered against the inclusion and exclusion criteria and 3 485 studies (97.5%) were excluded from further analysis. The main reasons for the exclusion of the studies were that IEO and EE were not the core focus of the study and the study was not conducted in the context of a higher education institution (university). A total of 89 studies (2.5%) were therefore accepted for in-depth analysis. Nine studies (0.2%) were excluded from further analysis as they were duplicates of other accepted studies. The results of the preliminary screening per database are outlined in Table 4.

Table 3: Preliminary results

Database	Total Discovered	Accepted Articles
<i>Sabinet Africa Journals</i>	33	6
<i>EbscoHost</i>	529	25
<i>Emerald Insight</i>	1 436	21
<i>ProQuest</i>	1 576	46
<i>Preliminary Totals</i>	3 574	98

Less Duplicate Studies

(9)

Net Total Studies Discovered

89

B. Thematic Areas

The study aimed to understand how EE influences the IEO of university students. The majority of studies that were identified through the systematic review investigated the relationship between EE and a student’s intention to start a business venture, but very few studies explored the orientation of students. There was therefore a gap in the current body of knowledge to better understand if students are orientated to become entrepreneurs upon completion of their studies. Furthermore, the systematic review also revealed that many entrepreneurial programmes at tertiary institutions focus mainly on theory-based teaching, while disregarding the need to integrate practice-based teaching to better enhance students’ orientation in choosing an entrepreneurial career. Figure 2 illustrates a structured visualisation of the results of the systematic review, illustrating a thematic map with six key themes. There are six main branches, which symbolise the thematic areas identified during the systematic review process.

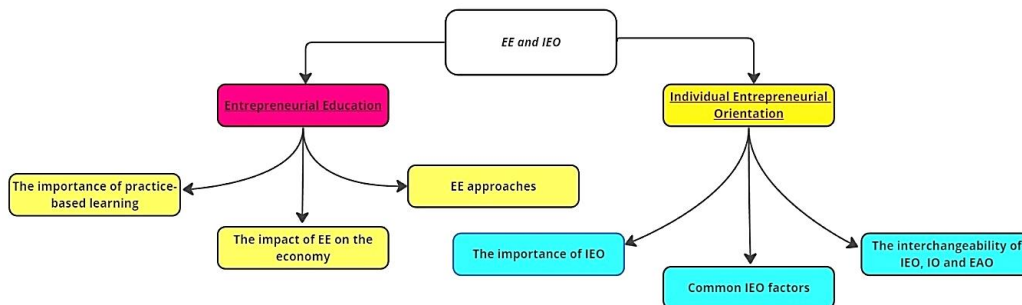


Figure 2: Themes identified during the systematic review

The following section covers each of the themes as illustrated in the structured visualisation.

1. Theme 1: The importance of practice-based learning

Practice-based learning has been regarded as an imperative element in entrepreneurial teaching (Bell & Bell, 2020). It has been found that students that are exposed to real-life business modelling as part of their tertiary education studies are better suited to gain the necessary theoretical knowledge while experiencing the various stages of the entrepreneurial process (Kozlinska et al., 2020). This involves lecturers persuading students to further develop their entrepreneurial capabilities by co-participating in the creation of various streams of knowledge (Hasan et al., 2017). It was also found during the systematic review that educators should be more inclined to create a ‘learning community’ so that students have the ability to share their visions and motivations; this will ensure that the students not only learn from their own experiences, but are also exposed to the experiences of others. This in turn will allow the students to develop new entrepreneurial abilities while improving the entrepreneurial abilities they already possess (Wei et al., 2019). A study conducted by Yamakawa et al. (2016) analysed the nature of the theoretical and practical pedagogies being used as part of EE studies and found that it is essential that practice-based pedagogy be expanded. The systematic review discovered that it is important that students have the theoretical knowledge of entrepreneurship but that they may only be convinced to pursue such a career should they tap into the practical nature of entrepreneurship, i.e. they should be taught how to analyse the business market for opportunities and by gaining experience through various other entrepreneurial businesses. Yamakawa et al. (2016) also found that through exposure to practice-based learning, students will have a greater ability to manage their businesses successfully. On the contrary, however, the practice-based teaching approach has also been criticised for being flawed because it is often regarded as a predictive and linear approach. Aldila Krisnaresanti et al. (2020); Kusumojanto et al. (2020) discuss the importance of enhancing the entrepreneurship programme curriculum to be presented more interestingly and creatively to further stimulate students’ interest in starting their business ventures. They also highlight the importance of ensuring that educators and institutions provide the necessary infrastructure and facilities that will directly support students in their entrepreneurial activities.

2. Theme 2: The impact of EE on the economy

Bakar et al. (2014); Barba-Sánchez & Atienza-Sahuquillo (2018); Boldureanu et al. (2020); Nkang (2013) unpack the importance of EE and argue that it acts as a driver towards stimulating technological and economic

growth in a country. Universities in any country are often viewed as the centre of knowledge creation among individuals and the individuals who are taught entrepreneurship effectively have been seen to pursue an entrepreneurial career that would ultimately contribute to the overall success of the country (Comunian & Faggian, 2014). EE can be taught either formally or informally, with the former resembling education received at higher education institutions, and the latter referring to education received from an individual's social ties, i.e. friends and family. However, it is important to note that the benefits of EE will only be seen over time as more individuals with the necessary knowledge and skills begin creating jobs rather than merely seeking job opportunities. EE also assists in combatting various socio-economic issues since the education received by individuals will empower them and their organisations to create social value for their communities (Wilson et al., 2009). Individuals from particular countries with relevant entrepreneurial knowledge and training are seen to venture into entrepreneurial activities rather than simply seeking out corporate employment as a means of greater job security. This in turn suggests that more individuals provide a helping hand in tackling a country's socio-economic challenges (Wilson et al., 2009).

3. Theme 3: EE approaches

Much of the EE being offered in South African higher education institutions today is considered to be in its developmental stages, as students mainly only engage with theory-based teaching. Kabongo & Okpara (2010) argue that entrepreneurship forms part of many different tertiary education qualifications, but very few offer courses that specialise in entrepreneurship directly. Canziani et al. (2015) point out that entrepreneurship should be seen as a method in which teaching should take place in a cross-disciplinary nature that focuses strongly on a learning-by-doing approach. EE has been centred on two prominent approaches, believed to be the origin of the development of further approaches – these approaches are known as experimental learning theory (ELT) and contemporary-based learning (CBL). The ELT approach has been defined by Kolb & Kolb (2005) as “an active learning pedagogy, where experiences are transformed and create implicit knowledge as a collection of social practices”. This approach focuses on students being exposed to experimental and discovery-based assessments which are aimed at enhancing their understanding by being exposed to industry leaders. The CBL approach relates to teaching based on cognition and behaviours that will integrate an individual's personality and behavioural perspectives. However, the CBL approach has been criticised because it does not adequately expose students to the business world; this vastly affects their social capital (Kolb & Kolb, 2005).

4. Theme 4: The importance of IEO

It is crucial to ensure that a country encourages and supports successful entrepreneurship as this will positively stimulate the economy and lead to economic growth (Westhuizen, 2017). Entrepreneurial orientation has elicited considerable interest as an organisational-level construct that determines an organisation's performance (Grande et al., 2011; Gupta & Gupta, 2015), but authors have also realised the importance of studying the individuals within these organisations to identify the factors that may be promoting or hindering entrepreneurship (McHenry & Welch, 2018; Sisilia & Sabiq, 2019). Through the systematic review, it was revealed that the opportunities chosen to be exploited by the organisation are ultimately the decisions made by individuals within the organisation (Langkamp Bolton & Lane, 2012; McHenry & Welch, 2018). The landmark study by Langkamp Bolton & Lane (2012) initiated further exploration of this concept, which has now been termed individual entrepreneurial orientation (IEO). The systematic review found that it is necessary to better understand the personal characteristics of the individuals engaging in entrepreneurial activities. However, the concept of IEO is relatively new and requires further examination to adequately operationalise all its elements (Koe, 2016).

5. Theme 5: Common IEO factors

Through the systematic review, it was found that entrepreneurial orientation was originally developed by Miller (1983) and is made up of three factors, namely innovativeness, proactiveness, and risk-taking. This concept was then further popularised by Covin & Miller (2014) in their study involving entrepreneurial strategic posture. A few years later, Lumpkin & Dess (1996) further expanded on the concept of entrepreneurial orientation and proposed a five-dimensional model which encompassed the three original factors (innovativeness, proactiveness, and risk-taking) along with an additional two factors, namely autonomy and competitive aggressiveness. Over the years, various studies have further explored the concept of entrepreneurial orientation and found that it has a positive influence on government-linked companies, the financial and non-financial performance of franchises, as well as brand and market performance (Dada & Watson, 2013; Koe, 2013; Reijonen et al., 2015). The interest then shifted to IEO when it was determined that it was also relevant to explore the entrepreneur. The study by Bolton and Lane (2012), which explored entrepreneurship at individual level instead of at organisational level, has been a driver to a better understanding of the IEO of university students (Koe, 2016; Mutlutürk & Mardikyan, 2018; Sisilia & Sabiq, 2019). Although studies have explored the IEO of university students, the majority of the studies conducted (Efrata et al., 2021; Koe, 2016; Sisilia & Sabiq, 2019; Stouraitis et al., 2022) used only the three original

entrepreneurial orientation dimensions, namely proactiveness, innovativeness, and risk-taking, while disregarding the factors of autonomy and competitive aggressiveness. Langkamp Bolton & Lane (2012) found that the two additional factors (autonomy and competitive aggressiveness) did not have a significant impact on the IEO of students but noted that further validation was necessary as these factors could have been presented as less significant due to the context of the students' environment. Therefore, it was worth exploring the original five entrepreneurial orientation factors (innovativeness, proactiveness, risk-taking, autonomy, and competitive aggressiveness) when measuring the IEO of university students to determine if the country where the student resides and various other factors could affect the degree of the factor's impact.

6. Theme 6: The interchangeability of IEO, intrapreneurial orientation (IO), and entrepreneurial attitude orientation (EAO)

Various synonyms have been studied in line with exploring entrepreneurship at individual level and these include the concepts of intrapreneurial orientation and entrepreneurial attitude orientation. A study conducted by Blanka (2019) aimed to explore the perspectives that individuals have of intrapreneurship and found that specific personality traits assist in determining the entrepreneurial individuals within an established organisation. Furthermore, the EAO scale was developed by P. B. Robinson et al. (1991) which aimed at including various attitudinal components (namely achievement, locus of control, perceived personal control, self-esteem, assertiveness, and risk orientation) which would affect the level of entrepreneurship.

IV. CONCLUSION

EE is an important element for all countries that strive to create successful entrepreneurs who will assist in enhancing economic growth and combatting societal issues. To address these economic concerns, higher education institutions must aim to provide individuals with valuable knowledge and skills to adequately equip them to pursue entrepreneurship as a career choice. The aim of the study was therefore to assess the effect that current EE approaches have on the individual entrepreneurial orientation of university students. It is important to determine the current entrepreneurial approaches that are being utilised in higher education institutions and whether this would convince students to choose an entrepreneurial career. The findings of the study show that many entrepreneurial courses utilise theory-based teaching and very few utilise practical-based teaching methods, i.e. internships. Traditional teaching is based on teaching students the theoretical components of entrepreneurship without embedding any practice. The majority of the identified studies also explored the relationship between EE and student intentions, but very few assessed the orientation aspect as in this current study. Also noted is the fact that many of the studies that explored IEO only did so by utilising the three original entrepreneurial orientation factors (proactiveness, innovativeness, and risk-taking).

Considering the results of the systematic review, it is recommended that higher education institutions adopt various entrepreneurial education approaches, while emphasising the need for practice-based teaching. It is therefore recommended that entrepreneurial education and its effects on student orientation receive increased and improved coverage. Also, there is a need to raise awareness among researchers to further investigate the various approaches available and to determine which is the best fit to orientate students to become entrepreneurs after the completion of their studies. The practical implications of the current study lie in determining the importance of finding modern and innovative ways of teaching entrepreneurship and ensuring that current higher education curriculums are incorporating practical-based teachings so that students are better equipped to become entrepreneurs upon completion of their studies. Furthermore, the current study adds to the body of knowledge by advancing the field of EE to better understand the role of EE in expanding the competencies and IEO of students. Current EE approaches are developed as a 'one size fits all' approach without considering the contextual variations that may exist. The limitations of the current study are that only four databases were considered as part of the systematic review, this may therefore suggest that a more comprehensive study is conducted to include other databases as well as methodologies to broaden the scope of the research material being analysed. Although the systematic review is considered an academically validated methodology, there are still limitations, and the findings should therefore not be taken as exhaustive.

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