

ENTREPRENEURIAL ORIENTATION AND PERFORMANCE OF ENTERPRISES OWNED BY POLYTECHNIC STUDENTS IN SOUTH-WEST NIGERIA

***EKECHUKWU, BERNADINE N.; **PROF. EPETIMEHIN, FESTUS M.; AND **DR. OLUWAYOMI, AYOADE EKUNDAYO**

*Rufus Giwa Polytechnic, Owo, Ondo State, Nigeria. **Joseph Ayo Babalola University, Ikeji Arakeji, Osun State.

ABSTRACT

This study was set to determine the relationship between entrepreneurial orientation and the performance of enterprises owned by polytechnic students in Southwest Nigeria. Quantitative research technique was adopted for this study using questionnaire. The questionnaire was administered purposively on seventy-seven (77) students that were entrepreneurs from each of the selected three public polytechnics while questionnaire was also administered purposively on fifty-two (52) students that were entrepreneurs from each of the selected three private polytechnics in South-West Nigeria, making a total of three hundred and ninety (390) respondents in total. SPSS was used in the analysis of data collected. Both descriptive statistics such as frequencies, percentages, mean values were used and inferential statistical analysis, such as regression and ANOVA were carried out on the data collected. Findings from the study showed that entrepreneurship orientation; increases students risk taking and performance of enterprises owned by polytechnic students; enhances students' access to finance and performance of enterprises owned by polytechnic students; helps small business to get access to capital and performance of enterprises owned by polytechnic students; increases students' competitive aggressiveness and performance of enterprises owned by polytechnic students; increases

Introduction:

Entrepreneurship education is offered as a compulsory course for all Polytechnic students in Nigeria. The course is being managed in the School of General Studies. In the Rufus Giwa Polytechnic for instance, Entrepreneurship Education is offered at both National Diploma (ND) and Higher National Diploma (HND). At National level, it is called Introduction to Entrepreneurship (EED 126) and The Practice of Entrepreneurship (EED 216) while at Higher National Diploma, it is called Entrepreneurship Development (EED 413). However, the goals of Entrepreneurial Development Education according to the National Board for Technical Education (NBTE) (2008) as offered in tertiary Education institutions including the Polytechnics are to inculcate in the students the ability to: Identify and solve problems using critical and creative thinking; Work effectively with others as a practice team member and cultivate the ability to resolve conflicts; Organize

students' propensity to act autonomously and performance of enterprises owned by polytechnic students; increases students' processes, practices, and decision-making activities and performance of enterprises owned by polytechnic students; opens the minds of students' opportunity recognition, evaluation and exploitation of business opportunity and performance of enterprises owned by polytechnic students; increases students' innovativeness and performance of enterprises owned by polytechnic students; increases students' problem-solving skills which invariably affect the performance of enterprises owned by polytechnic students in Southwest Nigeria. In addition to that, the study concluded that the variation in management performance of enterprises owned by polytechnics students in Southwest, Nigeria is significantly explained by entrepreneurship orientation. The study concludes that "there is significant relationship between entrepreneurship orientation and the management performance of enterprises owned by polytechnics students in Southwest, Nigeria".

Keywords: Entrepreneurial Orientation, Enterprises, Performance, Polytechnic Students, Nigeria.

and manage oneself and one's ability; Collect, analyze, organize and critically evaluate information (to make decisions that must be carried through; Communicate and negotiate effectively; Reflect on experiences and explore strategies for effective learning (to learn at all times); Become curious leading to readiness to experiment and innovate, being never satisfied with the status quo and consider self-employment as a viable option upon graduation from their institutions. Although, NBTE listed required resources for effective teaching and learning of EED Courses such as follows: infrastructural facilities, workshops, laboratories and instructional materials and equipment. The position of NBTE (2008) is that the provision of the required resources would aid students to acquire relevant skills needed for their entrepreneurial activities. In other word, students will acquire those basic skills that are necessary to enable them start, nurture, finance, market and maintain their own business enterprises through Entrepreneurship Education.

Importantly, the role of entrepreneurship education is to promote more entrepreneurial attitudes and behaviours, otherwise called entrepreneurial orientation which has been widely recognised (European Commission, 2008). Entrepreneurial orientation is the combination of knowledge, skills and awareness acquired by an individual that led to execution of entrepreneurial behaviour or creation and actualization of new venture (Abubakar & Yakubu, 2019). This is the operational definition of entrepreneurial orientation adopted for this study.

Furthermore, the concept that causes the reconciliation between the strategy and entrepreneurship disciplines is called "entrepreneurial orientation (EO)". Although, entrepreneurial orientation has its origins in the literature on strategy and its importance lies in previous research which has shown that the greater the entrepreneurial orientation, the better the firm's performance (Rauch, Wiklund, Lumpkin and Freese, 2009). Also, entrepreneurial orientation (EO) has been recognized as an important construct within the strategy and entrepreneurship literature in the 1970s where Mintzberg (1973) and Khandwalla (1977) were the pioneers of EO research (Covin & Wales, 2012; Michael, 2018). Entrepreneurial orientation (EO) construct is based on different variables to identify the organization's entrepreneurial behavior.

The conceptualisation of EO starts with Miller (1983) that considers an entrepreneurial firm as one that “engages in product market innovation, undertakes somewhat risky ventures, and is first to come up with 'proactive' innovations, beating competitors to the punch” (Miller, 1983). Hence, the antecedents of EO are a combination of three dimensions: innovativeness, proactiveness and risk-taking. Later, Lumpkin & Dess (1996) conceptualise EO as the processes, practices, and decision-making activities that lead to a new entry, and it encompasses one or more of the following dimensions: “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”. Also, scholars have added two other dimensions to EO: autonomy and competitive aggressiveness, which has set a turning point in EO research, moving away from previous conceptualisations (Basso et al., 2009). The increasing interest on this construct arises from its confirmed impact on business performance, profitability and growth, innovation, organizational learning, etc (Covin & Wales, 2012; Wales et al., 2013a). Entrepreneurial orientation in a business is geared towards the recognition, evaluation and exploitation of business opportunities and performance.

Statement of the Problem

There is massive unemployment rate of Nigerian graduates in the country due to scarcity of white-collar jobs. The challenges of high unemployment rate led to the proliferation of business enterprises by graduates desperate to find a means of livelihood,

However, most of these enterprises/businesses either continue to crawl or fizzle out completely within the first 3 years of operation due to lack of prerequisite skills and competencies required to move the business to success (Yakubu and Abubakar 2019)

Hence, the need to find out the relationship between entrepreneurship orientation and performance of enterprises owned by Polytechnic students in south west Nigeria

Research Objective

To determine the relationship between entrepreneurial orientation and management performance of enterprises owned by polytechnic students in South-West Nigeria.

Research Question

What is the relationship between entrepreneurial orientation and management performance of enterprises owned by polytechnic students in South-West Nigeria?

Null Hypothesis

There is no significant relationship between entrepreneurship orientation and management performance of enterprises owned by Polytechnic students in South-West, Nigeria.

Literature Review

(a) Conceptual review

i. Entrepreneurial orientation

Entrepreneurial orientation (EO) has been recognized as an important construct within the strategy and entrepreneurship literature in the last thirty years, being Mintzberg (1973) and Khandwalla (1977) the pioneers of EO research (Covin and Wales, 2012; Michael, 2018). The

increasing interest on this construct arises from its confirmed impact on business performance, profitability and growth, innovation, organizational learning, etc. (Covin & Wales, 2012; Wales et al., 2013a). The conceptualisation of EO starts with Miller (1983) that considers an entrepreneurial firm as one that “engages in product market innovation, undertakes somewhat risky ventures, and is first to come up with 'proactive' innovations, beating competitors to the punch” (Miller, 1983), stating that the antecedents of EO are a combination of three dimensions: innovativeness, proactiveness and risk-taking. Later, Lumpkin and Dess (1996) conceptualise EO as the processes, practices, and decision-making activities that lead to a new entry, and it encompasses one or more of the following dimensions: “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”. Therefore, those researchers have added two other dimensions to EO: autonomy and competitive aggressiveness, which has set a turning point in EO research, moving away from previous conceptualisations (Basso et al., 2009).

In this case, innovativeness is seen by Miller (1983) as product-market innovation activity. Later, Lumpkin & Dess (1996) propose a broader definition, that not only include the implementation of activities aiming at product innovation but also represent a propensity of the firm to undertake and support new ideas, experimentation and creative processes. Miller (1983) suggests that an entrepreneurial firm is able to come up with 'proactive' innovations, being proactiveness a “forward-looking perspective where companies actively seek to anticipate opportunities to develop and introduce new products to obtain first-mover advantages and shape the direction of the environment”. In turn, risk-taking behaviour reflects firms' willingness to allocate resources to uncertain and risky projects, activities, and solutions concerning the outcomes expected (Hughes & Morgan, 2007). Finally, Lumpkin & Dess (1996) define competitive aggressiveness as the firm's intensity and efforts to outperform its competitors, exploiting the firms' strengths and competitors' weaknesses (Hughes & Morgan, 2007) in order to be competitive. In turn, autonomy is described as the freedom given to employees to develop and fully implement new ideas, (Lumpkin & Dess, 1996), encouraging them to be creative, seek for new ideas and opportunities and to be self-directed (Hughes & Morgan, 2007).

ii. **Measuring entrepreneurial orientation**

Despite all five dimensions are well conceptualised in the literature, the nature, dimensionality and measurement of EO are still not consensual among researchers leading to a lack of clarity about the concept of EO (Wales, 2016). On the one hand, Covin & Slevin (1989), basing their conceptualisation in Miller's (1983) definition, use the three dimensions (proactiveness, risk-taking and innovativeness) and assume that those acts together by constituting a basic, unidimensional strategic orientation. On the other hand, Lumpkin & Dess's (1996) five-dimension conceptualisation suggests that the dimensions may vary independently of each other in many situations. This model is seen appropriated when researchers search for more accuracy because it provides more insights into the strength and variations of the individual relationships of each dimension (Covin & Wales, 2012). However, fewer studies explore Lumpkin & Dess's (1996) framework, being more common in the literature studies adopting the three-dimension framework (Wales et al., 2013b). Still, these few studies explore the five-dimension framework in various contexts and sample types as reported in Saha's et al. (2017) review. Also, Wales et al. (2013a) review shown increasing use of this conceptualization.

iii. Performance measurements

Business performance is a constant matter of discussion in strategic management literature due to its critical value for it, because through assessing organizations' performance it is possible to test a strategy, to examine its content or processes, issues and to overcome the main barriers found (Venkatraman and Ramanujam, 1986). But, if business performance is a complex concept, assessing the performance of NPOs is equally (or even more) complex. Hence, performance is multidimensional in nature and focusing in objective data may be inaccurate because it may not reflect the source of competitive advantage (Wales et al., 2013b). Furthermore, Hughes & Morgan (2007) measured the performance of firms at an embryonic stage of development through their customer and product performance.

Performance measurement is "the process of quantifying the efficiency and effectiveness of action" (Neely *et al.*, 2005). Performance measurement can either be financial performance such as profits and investment returns and market performance such as growth or share (Tidd, 2001). Also, performance measurement can be operational; non-financial performance such as flexibility, quality, and productivity (Tangen, 2004; (Kafetzopoulos and Psomas, 2015). The different types of performance measures also include direct and indirect, objective and subjective, and financial and non-financial (Saunila and Ukko 2012). Performance measurement was also categorized into three latent variable dimensions such as innovation performance, growth performance, and management performance (Lv, Lai and Liu, 2019) with 13 items.

(b) Empirical review

Entrepreneurial orientation (EO) is one of the most studied strategic orientations due to its confirmed impact on organizations' performance (Rauch et al., 2009). EO is defined as a strategic orientation that captures specifically entrepreneurial aspects of organizations' strategy in order to be better prepared to adjust their operations in dynamic competitive environments (Lumpkin & Dess, 1996). Studies on EO are mainly targeted too large for -profit enterprises and within these studies, there are studies that support the idea that EO influences employee's growth and commitment, the organizational learning and human capital (Wales et al., 2013b; Hakala, 2011). Despite there are no studies exploring the role of EO in the skills and behaviour development of the members of students' organizations or NPOs, we consider that this is an interesting topic to explore due to the increasing interest of researchers and policy makers on the impact of entrepreneurship education in the development of students (European Commission, 2012; Pittaway et al., 2009).

Despite the fact that the relationship between EO and performance has been reported before, for instance, by proposing a positive relationship between entrepreneurial posture and growth or profitability (Covin & Slevin, 1991). Lumpkin & Dess (1996) were the first authors to clarify the link between the two constructs, by proposing a different conceptual framework to assess this relationship. Since then, this relationship has been widely examined in literature by many authors reporting a positive link between EO and performance in large or industrial enterprises (Beyza & Öz, 2014), SMEs (Avlonitis & Salavou, 2007; Wiklund & Shepherd, 2005), public sector (Caruana et al., 2002), early-stage firms (Hughes & Morgan, 2007) and in the non-profit sector (Pearce et al., 2010). This has generated a general consensus that EO influences a firm's performance. However, there are also authors that found some incongruence in assessing this relationship, in which not all EO dimensions positively or significantly impact firms' performance (Hughes & Morgan, 2007; Pearce et al., 2010; Soininen et al., 2012). In spite of some of these incongruences,

Rauch et al. (2009) meta-analysis of 53 samples comprising over 14000 companies indicates that the relationship between EO and performance is moderately large and robust enough to different operationalisations, cultural contexts and type of organizations.

Entrepreneurial orientation has its own origin traced back to the work of Miller (1983) who provides a significant insight especially at the firm level. He suggested that an entrepreneurial firm is one that “engages in product market innovation, undertakes somewhat risky ventures and is first to come up with proactive innovations, beating competitors to the punch.” In his own view, “innovativeness”, “risk taking”, and “pro-activeness” are the key factors of entrepreneurial firms. Many researchers (Covin & Slevin, 1989; Naman & Slevin, 1993) have studied the concept of entrepreneurial orientation based on the original conceptualization of Miller (1983). However, Lumpkin & Dess (1996) in addition to the concept of Miller (1983) discovered and incorporated two more characteristics, which are autonomy and competitive aggressiveness. Studies have found a significant relationship between individual entrepreneurial orientation and business performance (Kollmann, et al., 2007; Bolton & Lane, 2012). Added to the direct relationship that exists between entrepreneurial orientation and intention, the study also proposed that entrepreneurial orientation will moderate the relationships that exists among entrepreneurial education and entrepreneurial intention (Ibrahim & Mas’ud, 2016; Aminu, 2016) in line with findings that the basic components of entrepreneurial orientation like pro-activeness helps in discovering and exploiting the environment toward opportunities identification better than its competitors (Smith & Cao, 2007). Furthermore, innovativeness played a significant role in the enhancement of abilities in coping with the environment towards innovating new product and services (Ireland, et al., 2009; Jabeen & Alekam, 2013). Finally, risk taking has to do with being bold enough to venture into new business, to obtain/borrow a huge amount and/or committing much resource into a new business venture in an environment that is not certain (Rauch, et al., 2009).

Entrepreneurial orientation (EO) concerns the processes, practices and decision-making activities applied by entrepreneurs leading to the inception of an entrepreneurial firm (Lumpkin & Dess, 1996). Lumpkin & Dess (1996) along with many others have defined pro-activeness, risk-taking, innovativeness, autonomy and competitive aggressiveness as the five dimensions of EO although some only include three of the five dimensions (Covin & Slevin, 1986; Miller,1983). Entrepreneurship is an essential topic for today’s polytechnic students. Studies show that more than half of people between the ages of 18-34 would prefer to start their own businesses.

As is apparent from the recent literature, studying the entrepreneurial tendencies of students and what factors affect these tendencies can aid in the better understanding of individual entrepreneurial orientation (IEO). Most studies in the literature are conducted on business students and their entrepreneurial tendencies. However, students of higher education from various fields react differently to entrepreneurship (Peprah, Afoakwah & Koomson, 2015), therefore, the range of students evaluated should be broadened to include students of different fields.

The construct and expressions of entrepreneurial orientation (EO) have accumulated ample attention of researchers over the years (Covin and Miller, 2014). Defining the core of entrepreneurship has been a continuing conceptual consideration (Henry et al., 2005). Schumpeter (1949) defined entrepreneurship as the stable disturbing force that causes creative destruction.

Miller (1983) noted that entrepreneurial orientation (EO) and identified risk-taking, innovativeness and proactiveness as the three elements of EO and Covin & Slevin (1986) later on. Additionally, Lumpkin & Dess (1996) incorporated another two elements, autonomy and competitive aggressiveness. However, some studies have argued that pro-activeness and competitive aggressiveness are fairly the same (Okhomina, 2010). Many researchers have used different variations of these previously defined components of EO along with some of their own concepts to describe a fairly consistent set of elements (Naldi et al., 2007). This has led to a variety of different definitions for the term EO. De Clercq et al. (2013) state that EO is the level of proactiveness, innovativeness and risk-taking in an organisation's behaviour. Okhomina (2010) defines EO as an important element of entrepreneurial intention (EI) that differentiates entrepreneurs from non-entrepreneurs according to their risk-taking, innovativeness and proactiveness capabilities. According to Covin & Miles (1999), innovation is the dimension that best represents entrepreneurship. Among the components of EO, risk-taking involves the propensity to take bold actions such as venturing into unknown markets and allocating a large portion of resources into ventures that have uncertain outcomes. Innovativeness refers to an eagerness to support creativity and new products, becoming technological leaders and establishing new processes (Lumpkin & Dess, 1996). Pro-activeness refers to an opportunity seeking perspective that entails introducing new products or services in anticipation of future demand and shaping the market (Lumpkin & Dess, 2001).

A large percentage of studies within the entrepreneurship literature refer to the Entrepreneurial Intension, orientation and behaviour in the business aspect whereas the concept of EO can apply to individuals as well as organisations (Robinson & Stubberud, 2014). Understanding EO at the individual level could be beneficial to future business owners, business breeders and potential investors (Bolton and Lane, 2012). While EO is characterised in literature as the overall aspect of an organisation (Goktan & Gupta, 2015), IEO is understood to be a comprehensive evaluation of individual tendency towards entrepreneurship (Basso et al., 2009). The unique contribution of individual entrepreneurial orientation (IEO) to research may be relevant to assessing individual decision-makers general tendency towards entrepreneurial decision and actions, whether within an organisational boundary or outside it (Kollman et al., 2007). For instance, one of the major components of EO; risk-taking, can be at an individual level (Sitkin & Pablo, 1992) or a firm level characteristic (Baird and Thomas, 1985). Entrepreneurs generally acknowledge the risks that come along with entrepreneurship and are willing to take risks in return for possible rewards (Segal et al., 2005).

Although a vast amount of studies have been carried out to analyse the effect of EO and EI on firm performance and other firm related behaviour, there have been a number of studies related to the EO of students. For example, the study of Sánchez (2013) who found that entrepreneurial education was significantly related to the risk-taking and pro-activeness abilities of students. Another study reported that students who are immersed in entrepreneurial education show higher levels of innovativeness (Storen, 2014). Accordingly, universities/polytechnics play a significant role in training entrepreneurs as greater knowledge along with a higher level of information and abilities provides an individual with a greater competency to engage in entrepreneurial activities and to acquire entrepreneurial attitudes (Barahona, Cruz & Escudero, 2006). Taatila and Down (2012) found that students with more experience related to

entrepreneurship had a higher EO than those that did not have any experience with entrepreneurship.

As stated in the literature, EO can be taken at the individual level as well as the corporate (Robinson & Stubberrud, 2014) and is believed to also be a multi-dimensional construct. Studies that have investigated IEO such as that of Koe (2016) have taken the three conceptualised dimensions of EO, innovativeness, proactiveness and risk-taking as the items of the IEO construct. Koe (2016) studied the relationship between IEO and EI by conducting a survey on university students enrolled in an “entrepreneurial university”. This study validated the need to study EO at an individual level. Below, the remaining constructs and how they have been measured within this study has been given along with the corresponding hypotheses. Miller (1983) characterizes entrepreneurial orientation as the proactive nature of businesses, of products and services in the market seeking innovations investing into it in spite of the high risk following it. Firms with entrepreneurial orientation try to identify and exploit new opportunities persistently, create new values and become leaders in markets. Entrepreneurial orientation is an important factor that leads to the successful development of new products, high financial and nonfinancial business performance and high social performance. In addition to usual three factors, Lumpkin and Dess (1996) added competitive aggressiveness and autonomy as for the two additional factors that comprise entrepreneurial orientation. Entrepreneurial orientation was first introduced for an organizational level of studies. However, these days, because of the huge success, a lot of researchers use this construct for the studying of individual level of entrepreneurship studies.

A lot of scholars claimed that entrepreneurship courses not only provide students basic knowledge and skill for entrepreneurship but also make students have a positive attitude towards entrepreneurship. Timmons (1994) put strong emphasis on entrepreneurship skills and entrepreneurship education should teach these skills such as the ability to create high performing culture, the ability to connect and network and the ability to lead and work in teams. To succeed, entrepreneurs should have the necessary skills to deal with entrepreneurial problems. Improved skills may increase students’ confidence on entrepreneurship and promotes the chances of entrepreneurial success.

Theoretical Framework

Theory of Planned Behaviour

The theory of planned behaviour (TPB) is one of the theories in entrepreneurship education among other theories such as human capital entrepreneurship theory, Experiential Learning theory, Theory of Self Efficacy and so on. The theory of planned behaviour was introduced by Ajzen (1991) due to gaps in the theory of reasoned action (TRA). TPB is highly effective in predicting a wide range of behaviour and noted that individual behaviour was not solely based on their will, rather including external factor called perceived behavioural control (Ajzen, 1991). In concise, the perceived behavioural control in TPB entails attitudes towards behaviour (personal attitude and individual conduct), subjective norms (influence of significant other; perceived social pressure) and perceived behavioural control (Ajzen, 1991). The TPB details how the influences upon an individual determine that individual's decision to follow a particular behaviour. However, the determinants of behaviour are intentions to engage in that behaviour and Perceived Behavioural Control (PBC).

Intuitively, entrepreneurial students, perhaps, have a strong intention to, for example, engaged in entrepreneurship; when they hold more positive attitudes towards the behaviour, perceive social pressures from respected and valued opinions and feel capable of establishing and running a successful enterprise before and after graduation without difficulty. However, this intention in conjunction with their perceptions of capability, determines the likelihood that they will improve on their enterprise performance. Based on this fact, the theory of planned behaviour forms the hub on which this study is hinged.

Methodology

This study adopted quantitative research technique. Specifically, the study used questionnaire. This is because, questionnaire enhances the identification of statistically significant results from the data analysis procedure (Zikmund, Babin, Carr, & Griffin, 2010). Furthermore, primary data was sourced for this study with the aid of questionnaire administered on the Polytechnic students that are entrepreneurs from the selected polytechnics in South-west Nigeria. This is because, data collection is the foundation upon which research is built (Otakiti, 2014). In addition to that, the channel or passage through which data is being collected for the purpose of research is known as data collection (Yim, 2011). The study adopted multi-stage sampling technique. For stage one, three states were randomly selected out of six states in South-West Nigeria. These include: Ekiti State, Ondo State and Osun state. For stage two, six polytechnics were purposively selected which includes one; (1) private and one (1) public polytechnic. In Ekiti State, Federal Polytechnic Ado and Crown Polytechnic Ado Ilawe were selected. In Ondo State, Rufus Giwa Polytechnic Owo and Best Solution Polytechnics, Akure were selected. Also in Osun State, Federal Polytechnic Ede and The Polytechnic Ile-Ife were selected. For the third stage, the population of the polytechnic students that are entrepreneurs are unknown, hence, there is need for the use of Cochran formula to determine the sample size which gives 385 (three hundred and eighty five) questionnaire. Copies of the questionnaire were administered on the ration of 60% for public polytechnic students and 40% for private polytechnic students. The justification for the classification in the distribution of the questionnaire is on the fact that public institutions of higher learning seem to have more student population than their private counterparts especially in Polytechnics in Nigeria. The questionnaire was administered purposively on seventy-seven (77) students that are entrepreneurs from each of the selected three (3) public polytechnics while questionnaire was also administered purposively on fifty-two (52) students that are entrepreneurs from each of the selected three (3) private polytechnics in South-West Nigeria, making three hundred and ninety (390) respondents in total. SPSS was deployed in the analysis of data collected. Both descriptive such as frequencies, percentages, mean values were used and inferential statistical analysis such as regression and ANOVA were carried out on the data collected.

Results and Discussion

Table 1: Entrepreneurship orientation and the performance of enterprises owned by polytechnics students in Southwest, Nigeria

Characteristics	SA	A	U	D	SD	Total	Mean	SDv.
Entrepreneurship orientation increases students risk taking which increase the performance of students' owned enterprise	96 (29.8)	197 (61.2)	11 (3.4)	12 (3.7)	6 (1.9)	322	4.13	.796
Entrepreneurial orientation enhances students' access to finance and also increase the	96 (29.8)	191 (59.3)	29 (9)	6 (1.9)	-	322	4.17	.659

performance of students' owned enterprise								
Entrepreneurial orientation helps small business to get access to capital and also improve the performance of students' owned enterprise	87 (27)	203 (63)	17 (5.3)	6 (1.9)	9 (2.8)	322	4.10	.801
Entrepreneurial orientation increases students' competitive aggressiveness which led to increase in the performance of students' owned enterprise	175 (54.3)	126 (39.1)	12 (3.7)	6 (1.9)	3 (0.9)	322	4.44	.739
Entrepreneurial orientation increases students' propensity to act autonomously which led to increase in the performance of students' owned enterprise	181 (56.2)	82 (25.5)	59 (18.3)	-	-	322	4.38	.777

Legend: SA = Strongly agree; A = Agree; U = undecided; D = Disagree; SD = Strongly Disagree; SDv. = Standard Deviation

Table 1 above shows that majority (29.8% and 61.2%) of the polytechnic students in Southwest Nigeria strongly agree and agree respectively with the idea that entrepreneurship orientation increases students risk taking which increase the performance of students' owned enterprises. Although, 3.4% of the respondents were undecided while 3.7% and 1.9% of the remaining respondents disagree with the idea respectively. However, the mean value (4.13) and standard deviation (0.796) implies that the responses of the polytechnic students in Southwest Nigeria clustered around the mean. This means that polytechnic students in Southwest Nigeria unanimously agree that entrepreneurship orientation increases students risk taking which increase the performance of students' owned enterprise.

Table 1 shows that majority (29.8% and 59.3%) of the polytechnic students in Southwest Nigeria strongly agree and agree respectively with the idea that entrepreneurial orientation enhances students' access to finance and also increase the performance of students' owned enterprise. Although, 9% of the respondents were undecided while only 1.9% of the remaining respondents disagree with the idea respectively. However, the mean value (4.17) and standard deviation (0.659) implies that the responses of the polytechnic students in Southwest Nigeria clustered around the mean. This means that polytechnic students in Southwest Nigeria unanimously agree that entrepreneurial orientation enhances students' access to finance and also increase the performance of students' owned enterprises.

Table 1 shows that majority (27% and 63%) of the polytechnic students in Southwest Nigeria strongly agree and agree respectively with the idea that entrepreneurial orientation helps small business to get access to capital and also improve the performance of students' owned enterprise. Although, 5.3% of the respondents were undecided while 1.9% and 2.8% of the remaining respondents disagree with the idea respectively. However, the mean value (4.10) and standard deviation (0.801) implies that the responses of the polytechnic students in Southwest Nigeria clustered around the mean. This means that polytechnic students in Southwest Nigeria

unanimously agree that entrepreneurial orientation helps small business to get access to capital and also improve the performance of students' owned enterprise.

Table 1 shows that majority (54.3% and 39.1%) of the polytechnic students in Southwest Nigeria strongly agree and agree respectively with the idea that entrepreneurial orientation increases students' competitive aggressiveness which led to increase in the performance of students' owned enterprises. Although, 3.7% of the respondents were undecided while 1.9% and 90.9% of the remaining respondents disagree with the idea respectively. However, the mean value (4.44) and standard deviation (0.739) implies that the responses of the polytechnic students in Southwest Nigeria clustered around the mean. This means that polytechnic students in Southwest Nigeria unanimously agree that entrepreneurial orientation increases students' competitive aggressiveness which led to increase in the performance of students' owned enterprises.

Table 1 shows that majority (56.2% and 25.5%) of the polytechnic students in Southwest Nigeria strongly agree and agree respectively with the idea that entrepreneurial orientation increases students' propensity to act autonomously which led to increase in the performance of students' owned enterprises. Although, 18.3% of the respondents were undecided. However, the mean value (4.38) and standard deviation (0.777) implies that the responses of the polytechnic students in Southwest Nigeria clustered around the mean. This means that polytechnic students in Southwest Nigeria unanimously agree that entrepreneurial orientation increases students' propensity to act autonomously which led to increase in the performance of students' owned enterprises.

Table 2 Entrepreneurship orientation and the performance of enterprises owned by polytechnics students in Southwest, Nigeria

Characteristics	SA	A	U	D	SD	Total	Mean	SDv.
Entrepreneurial orientation increases students' processes, practices, and decision-making activities that led to increase in the performance of students' owned enterprise	105 (32.6)	155 (48.1)	56 (17.4)	3 (0.9)	3 (0.9)	322	4.11	.782
Entrepreneurial orientation opens the minds of students' opportunity recognition, evaluation and exploitation of business opportunity which later increases the performance of students' owned enterprise	102 (31.7)	137 (42.5)	24 (7.5)	59 (18.3)	-	322	3.88	1.055
Entrepreneurship orientation increases students' innovativeness which increases the performance of students' owned enterprise	117 (36.3)	57 (17.7)	145 (45)	-	3 (0.9)	322	3.89	.942
Entrepreneurship education increases students' proactiveness	111 (34.5)	123 (38.2)	21 (6.5)	67 (20.8)	-	322	3.86	1.108

which increases the performance of students' owned enterprise								
Entrepreneurship orientation increases students' problem-solving skills and the performance of students' owned enterprise	105 (32.6)	134 (41.6)	74 (23)	6 (1.9)	3 (0.9)	322	4.03	.846

Legend: SA = Strongly agree; A = Agree; U = undecided; D = Disagree; SD = Strongly Disagree; SDv. = Standard Deviation

Table 2 above shows that majority (56.2% and 25.5%) of the polytechnic students in Southwest Nigeria strongly agree and agree respectively with the idea that entrepreneurial orientation increases students' processes, practices, and decision-making activities that led to increase in the performance of students' owned enterprises. Although, 17.4% of the respondents were undecided. While 0.9% and 0.9% disagree and strongly disagree with the idea that entrepreneurial orientation increases students' processes, practices, and decision-making activities that led to increase in the performance of students' owned enterprise. However, the mean value (4.11) and standard deviation (0.782) implies that the responses of the polytechnic students in Southwest Nigeria clustered around the mean. This means that polytechnic students in Southwest Nigeria unanimously agree that entrepreneurial orientation increases students' processes, practices, and decision-making activities that led to increase in the performance of students' owned enterprise.

Furthermore, Table 2 shows that majority (31.7% and 42.5%) of the polytechnic students in Southwest Nigeria strongly agree and agree respectively with the idea that entrepreneurial orientation opens the minds of students' opportunity recognition, evaluation and exploitation of business opportunity which later increases the performance of students' owned enterprises. Although, 7.5% of the respondents were undecided. While 18.3% disagree with the idea that entrepreneurial orientation opens the minds of students' opportunity recognition, evaluation and exploitation of business opportunity which later increases the performance of students' owned enterprise. However, the mean value (3.88) and standard deviation (1.055) implies that the responses of the polytechnic students in Southwest Nigeria clustered around the mean. This means that polytechnic students in Southwest Nigeria unanimously agree that entrepreneurial orientation opens the minds of students' opportunity recognition, evaluation and exploitation of business opportunity which later increases the performance of students' owned enterprise.

In addition, Table 2 shows that 36.3% and 17.7% of the polytechnic students in Southwest Nigeria strongly agree and agree respectively with the idea that entrepreneurship orientation increases students' innovativeness which increases the performance of students' owned enterprise. Although, most (45%) of the respondents were undecided, while 0.9% strongly disagree with the idea that entrepreneurship orientation increases students' innovativeness which increases the performance of students' owned enterprise. However, the mean value (3.89) and standard deviation (0.942) implies that the responses of the polytechnic students in Southwest Nigeria clustered around the mean. This means that polytechnic students in Southwest Nigeria unanimously agree that entrepreneurship orientation increases students' innovativeness which increases the performance of students' owned enterprises.

Table 2 also shows that 34.5% and 38.2% of the polytechnic students in Southwest Nigeria strongly agree and agree respectively with the idea that entrepreneurship education increases students' proactiveness which increases the performance of students' owned enterprises. Although, 6.5% of the respondents were undecided, while 20.8% strongly disagree with the idea that entrepreneurship education increases students' proactiveness which increases the performance of students' owned enterprises. However, the mean value (3.86) and standard deviation (1.108) implies that the responses of the polytechnic students in Southwest Nigeria scattered around the mean. This means that polytechnic students in Southwest Nigeria were not unanimous in their agreement on how entrepreneurship education increases students' proactiveness which increases the performance of students' owned enterprises.

Table 2 shows that 32.6% and 41.6% of the polytechnic students in Southwest Nigeria strongly agree and agree respectively with the idea that entrepreneurship orientation increases students' problem-solving skills and the performance of students' owned enterprises. Although, 23% of the respondents were undecided, while 1.9% and 0.9% disagree and strongly disagree with the idea that entrepreneurship orientation increases students' problem-solving skills and the performance of students' owned enterprise. However, the mean value (4.03) and standard deviation (0.846) implies that the responses of the polytechnic students in Southwest Nigeria clustered around the mean. This means that polytechnic students in Southwest Nigeria unanimously agree that entrepreneurship orientation increases students' problem-solving skills and the performance of students' owned enterprises.

Test of Hypothesis

H₀: There is no significant relationship between entrepreneurship orientation and management performance of enterprises owned by polytechnics students

Table 3 Model Summary of entrepreneurship orientation and the Management performance of enterprises owned by polytechnics students.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.832 ^a	.692	.688	.332

a. Predictors: (Constant), X₁₋₁₀

The Table 3 shows that R = 0.832 which means that 83% of relationship exist between entrepreneurship orientation and the management performance of enterprises owned by polytechnics students.in Southwest, Nigeria. Also, Table 3 shows 0.692 as the coefficient of determination (R²), meaning that, about 69% of variation in management performance of enterprises owned by polytechnics students in Southwest, Nigeria is explained by. entrepreneurship orientation.

Table 4 Combined Effect of entrepreneurship orientation on the management performance of enterprises owned by polytechnics students (ANOVA^a)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	188.16	10	18.816	3.818	.000 ^b
	Residual	1532.67	311	4.928		
	Total	1720.83	321			

a. Dependent Variable: Management performance (Customer satisfaction)

b. Predictors: (Constant), X₁₋₁₀

* = Significant @ 5%

Furthermore, the Table 4 shows that entrepreneurship orientation significantly ($F = 3.818$, $p = 0.000$) influence the innovation performance of enterprises owned by polytechnics students in Southwest, Nigeria. The implication is that entrepreneurship orientation improves management performance of enterprises that are owned by polytechnic students in Southwest, Nigeria.

Table 5 Effect of entrepreneurship orientation on the performance of enterprises owned by polytechnics students (Coefficients^a)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.685	.101		56.232	.000
	X ₁	.293	.069	.287	4.264	.000
	X ₂	-.245	.081	-.241	-3.037	.703
	X ₃	.432	.087	.424	4.979	.000
	X ₄	.308	.054	.337	2.715	.064
	X ₅	.332	.066	.343	5.001	.000
	X ₆	.002	.066	.002	.023	.981
	X ₇	-.084	.077	-.075	-1.091	.276
	X ₈	-.264	.065	-.229	-4.034	.000
	X ₉	.184	.089	.182	2.061	.040
	X ₁₀	.303	.100	.315	3.039	.003

a. Dependent Variable: Management performance (Customer satisfaction)

Legend

Where X₁₋₁₀ = Independent variables; Y = Dependents variable

- X₁ = Entrepreneurship orientation increases students risk taking which increase the performance of students' owned enterprise
- X₂ = Entrepreneurial orientation enhances students' access to finance and also increase the performance of students' owned enterprise
- X₃ = Entrepreneurial orientation helps small business to get access to capital and also improve the performance of students' owned enterprise
- X₄ = Entrepreneurial orientation increases students' competitive aggressiveness which led to increase in the performance of students' owned enterprise
- X₅ = Entrepreneurial orientation increases students' propensity to act autonomously which led to increase in the performance of students' owned enterprise
- X₆ = Entrepreneurial orientation increases students' processes, practices, and decision-making activities that led to increase in the performance of students' owned enterprise

- X_7 = Entrepreneurial orientation opens the minds of students' opportunity recognition, evaluation and exploitation of business opportunity which later increases the performance of students' owned enterprise
- X_8 = Entrepreneurship orientation increases students' innovativeness which increases the performance of students' owned enterprise
- X_9 = Entrepreneurship education increases students' proactiveness which increases the performance of students' owned enterprise
- X_{10} = Entrepreneurship orientation increases students' problem-solving skills and the performance of students' owned enterprise
- Y = Management performance (Customer satisfaction).

More so, Table 5 shows that a positive relationship exist between entrepreneurship orientation increases students risk taking which increase the performance of students' owned enterprise (X_1) and management performance (Mp) ($B = 0.293$). The relationship between X_1 and Mp is statistically significant ($T = 4.264$; $p = 0.000$).

Furthermore, a positive relationship exists between entrepreneurial orientation helps small business to get access to capital and also improve the performance of students' owned enterprise (X_3) and management performance (Mp) ($B = 0.432$). The relationship between X_3 and Mp is statistically significant ($T = 4.979$; $p = 0.000$).

Furthermore, Table 5 shows that there is positive relationship between entrepreneurial orientation increases students' propensity to act autonomously which led to increase in the performance of students' owned enterprise (X_5) and management performance (Mp) ($B = 0.332$). The relationship between X_5 and Mp is statistically significant ($T = 5.001$; $p = 0.000$).

There is positive relationship between entrepreneurship education that increases students' proactiveness which increases the performance of students' owned enterprise (X_9) and management performance (Mp) ($B = 0.184$). The relationship between X_9 and Mp is statistically significant ($T = 2.061$; $p = 0.040$).

There is positive relationship between entrepreneurship orientation increases students' innovativeness which increases the performance of students' owned enterprise (X_9) and management performance (Mp) ($B = 0.303$). The relationship between X_9 and Mp is statistically significant ($T = 3.039$; $p = 0.003$).

Decision on hypothesis

Based on the report in Table 4 however, it is scientifically justifiable to refute the null hypothesis that says that "there is no significant relationship between entrepreneurship orientation and the management performance of enterprises owned by polytechnics students in South-West, Nigeria". Hence, the alternative hypothesis is accepted. The study concludes that, "there is significant relationship between entrepreneurship orientation and the management performance of enterprises owned by polytechnics students in South-West, Nigeria".

Conclusion and Recommendations

The study concluded that entrepreneurship orientation: increases students risk taking; enhances students' access to finance; helps small business to get access to capital; increases students' competitive aggressiveness; increases students' propensity to act autonomously; increases

students' processes, practices, and decision-making activities; opens the minds of students' opportunity recognition, evaluation and exploitation of business opportunity; increases students' innovativeness; increases students' problem-solving skills which invariably affect the performance of enterprises owned by polytechnic students in South-West Nigeria. The study also concluded that there is significant relationship between entrepreneurship orientation and the management performance of enterprises owned by polytechnics students in Southwest, Nigeria. In addition to that, the variation in management performance of enterprises owned by polytechnics students in South-West, Nigeria is significantly explained by entrepreneurship orientation. The implication is that entrepreneurship orientation improves management performance of enterprises that are owned by polytechnic students in South-West, Nigeria. The study recommends that polytechnic managements that want to proliferate/promote entrepreneurial orientations should provide conducive entrepreneurial learning environment and applied platforms for polytechnic students that owned enterprises. Furthermore, government that wants to encourage student polytechnic entrepreneurs to develop appropriate. Entrepreneurial orientation should provide needed resources such as: student entrepreneurs centers within the schools organize regular workshops that will encourage polytechnic students to develop a more positive attitude towards entrepreneurship classes as well as propelled to venture into entrepreneurship.

Areas for Further Studies

This study is limited to polytechnic students that owned enterprises in South-West, Nigeria, further studies may be extended to Nigeria as a whole. In addition, further studies may compare polytechnic students and universities students that owned enterprises in Nigeria.

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