Afropolitan Journals

ISSN: 2780-5981X www.afropolitanjournals.com

Moderating Effect of Effectuation on Entrepreneurial Traits of University Graduates and Venture Creation in Kwara State, Nigeria

G. E. Osanyinlusi [1], Professor S. B. Isiaka [2] and P. O. Adebayo [3]

[1]Department of Business and Entrepreneurship, Kwara State University, Malete, Nigeria. [2]Department of Business Administration, University of Ilorin, Nigeria. [3]Department of Business and Entrepreneurship, Kwara State University, Malete, Nigeria.

Corresponding author: gosanyinlusi@gmail.com

Abstract

In the current economic and social environment, entrepreneurs have contributed in a large measure to job creation through a ceaseless pursuit of new ventures thereby alleviating the problem of unemployment in many countries of the world. Given this entrepreneurial effectiveness in economic development, scholars, policymakers, and other relevant stakeholders have sought to explore the underlining traits that distinguish entrepreneurs from the rest of the populace. The focus of this paper was to unveil some of these traits and examine the causal relationship between them and venture creation intention by university graduates, and, the moderating role of effectuation on the traits. Using a survey design approach, data were collected randomly from 243 students in four selected universities across Kwara State, Nigeria. Partial Least Squares Structural Equation Modeling (PLS-SEM) was employed to analyse the data. Our findings showed that traits such as entrepreneurial intention, entrepreneurial skills and effectuation logic were associated with venture creation, while opportunity recognition, risk propensity and entrepreneurial education were not. The moderating effect of effectuation was insignificant. The paper concluded that some of the assumed traits in extant literature have been insignificant in this study. Hence, the paper, therefore, recommended that more research needs to be carried out to unveil other important underlying behavioural traits affecting entrepreneurs in Kwara State, Nigeria.

Keywords: Entrepreneurial Traits, Effectuation, Entrepreneurial Skill Acquisition, University Entrepreneurship Education, Risk Propensity Venture Creation.

Introduction

In the constantly rapid and challenging global economic environment, entrepreneurs are widely acknowledged as individuals who have the knowledge and abilities that affect our everyday life because of their constant innovations resulting in the introduction of new products and services that affect our standard of living.

Encouraged by the proven entrepreneurial effectiveness in unemployment alleviation and economic development, scholars, policymakers and other stakeholders, have become more curious in unveiling the set of entrepreneurial traits that continue to differentiate entrepreneurs from the rest of the populace.

Extant literature is filled with many empirical studies that sought to unveil the factors or discerning traits that are possessed by these entrepreneurs that stand them out in the society (Voda & Florea, 2019; Ibidunni et al., 2020; Ahmed et al., 2020). Venture creation is regarded as the intention to start a business by employing entrepreneurial skills, business engagement, entering into partnership such as between academic researchers and the industry for real-world challenges, or starting as a member of a team(Shepherd et al.,2020) in sharing tasks, obligations and quality parameters with the goal of achieving business growth through the combination of owners, employees and outside stakeholders to influence company success, in terms of revenue, size, market share product and market expansion and profitability.

Much success of small enterprises depends to a large extent on the human capital of their owner-managers. There are various factors leading to success of entrepreneurs such as technology, capital, government support, business environment and information processing while it is generally believed that the success of an entrepreneur largely depends on some traits which usually vary from one entrepreneur to the other. Research into the entrepreneurial personality has shown that most successful entrepreneurs share a definite group of personality traits. The traits most frequently associated with the success of the entrepreneurs are innovation, creativity, persistence, self-confident, positive attitude, problem solving, need for independence, and enjoy taking risks. Others include emotional stability, personal relations, consideration and tactfulness. Further, traits such as self-concept, perceived managerial competence, work stress and business commitment are considered important during the stages of venture dream, business idea and new venture creation (Metallo et al, 2021).

University entrepreneurship education programmes have played a valuable role in developing knowledge, skills, traits and competencies in their graduates that can enable them to create new ventures as well as equip them to prepare grounds for subsequent career pursuit across different occupations either as employees or self-employed. The concept of a university graduate in the contemporary economy is one who is not only able to create their own venture but also possesses a greater opportunity of employability. This concept, according to the European Commission, (2018), refers to graduates with the ability to move backward and forward between employment and self-employment. Thus, entrepreneurship education not only develops competencies which are geared toward venture creation but also develop competencies that become relevant in entrepreneurial positions in subsequent established organisations (Alsos et al., 2022, Dada et al., 2023)

Statement of the Problem

Extant studies have discussed traditional factors such as financial capital, support, resources, technology and innovation ideas (Nambisan, 2017; Schmitz, Urbano, Dandolini, de Souza, & Guerrero, 2017), but the incidence of psychological factors such as personality, behaviors, self-efficacy to new venture creation has been disparately considered (Hamilton,

Papageorge, & Pande, 2019; Kirkley, 2017). Moreover, the mixed and inconsistent relationships between different personality factors and entrepreneurial intentions call for the need for more empirical studies to measure the relationship of personality traits and entrepreneurial activity (Sahin, Karadag, & Tuncer, 2019). It is arguable if the presence of these traits has universal applications as many individuals are not able to pioneer their ventures in spite of the many entrepreneurship programmes and support of the government especially in Nigeria (Soetanto, Huang, & Jack, 2018).

Objective of the Study

The objective of the study is to examine the major entrepreneurial traits required of university graduates which would facilitate their capacity for new venture creation in the Nigerian context.

Research Question

The research question was to explore the relevant entrepreneurial traits should be possessed by university graduates to facilitate their likelihood of creating new ventures.

Research Hypothesis

H_0- Opportunity Recognition does not significantly influence new venture creation

The sub-hypotheses are:

H_{01}- Entrepreneurial Intentions do not have a significant effect on new venture creation

H_{02}- Entrepreneurial Self-efficacy does not have significant effect on new venture creation

H_{03}- University Entrepreneurship education does not have a significant effect on new venture creation

H_{04}- Entrepreneurial Skill Acquisition does not have a significant effect on new venture creation

H_{05}- Risk propensity does not have a significant effect on Venture creation by university graduates

H_{06}- Effectuation logic does not moderate significantly between university entrepreneurial traits and venture creation

Literature Review

The personality traits that define entrepreneurs have been of significant interest to academic research for several decades. Previous studies have used vastly different definitions of the term "entrepreneur", meaning their subjects have ranged from rural farmers to tech-industry start-up founders. As a consequence, most research has investigated disparate sub-types of entrepreneurs, which may not allow for the generalization of inferences to be made. This variation in entrepreneur samples reduces the

comparability of empirical studies which tends to vary between sub-types and contexts ((Ferreira et al. 2019).

Consequently, extant studies have based their research on a variety of samples of subjects that can all technically be classified as entrepreneurs. Some of the samples used to examine personality traits include founders of technology-based enterprises (Roberts 1989), local farmers (Mubarak et al. 2019) and students as potential entrepreneurs (Ispir et al. 2019). The definitions of entrepreneurship in this paper include creators of "Main Street" small businesses and young university students attending an entrepreneurship class. While some classic studies have looked at how personality traits impact transitions into self-employment, this paper covers a range of entrepreneurs who operate small-scale service businesses to high-growth firms. As the types of ventures continue to proliferate for modeling core traits in respect of individual- and team-level entrepreneurs, it becomes more important to have a perspective of the personality traits associated with the different entrepreneurs and how they influence their entrepreneurial activity. Chen and Shi, (2020), suggest that entrepreneurship is a motivated behavior that is not facilitated by entrepreneurial business opportunities, but rather by the entrepreneur's willingness to start a business venture.

Some of the personality traits commonly sampled in extant studies are, The Big Five, Need for Achievement, Innovativeness, Entrepreneurial Self-Efficacy, Locus of Control, and Risk attitudes. The "Big Five" (Goldberg 1990; McCrae and John 1992) is a common classification system of personality traits. It is a replicable and robust methodology for grouping thousands of potential personality descriptors. As the name states, the Big Five consists of five categories: extraversion, agreeableness, conscientiousness, neuroticism and openness to experience. Some other underlying characteristics or traits have been identified as being shared by entrepreneurs. Such traits include risk tolerance, need for achievement, and locus of control (Ibidunni et al., (2021), conscientiousness, openness, alertness. entrepreneurial intention extraversion, and openness (Awwad & al-Aseer, (2021). Biswas and Verma (2021) also identified Need for Achievement, alertness and entrepreneurial attitude as very significant, while Kitching and Rose (2020) identified risk prosperity and skills acquisition among others.

Specifically, entrepreneurial traits that are needed for venture creation include entrepreneurial imaginativeness, creativity and innovation which involve thinking out novel activities and ventures through the imaginative identification and exploitation of opportunities (Kier & McMullen, 2018). Innovativeness is a personality trait that is often a central component of entrepreneurial orientation (Kraus et al. 2019). This imaginative skill becomes handy in new-venture creation because it facilitates the recognition of a potential opportunity, which can be tested and refined as the basis of a new venture. Expectedly, additional traits have been fused into the Big-5 for entrepreneurial work, including self-efficacy, innovativeness, locus of control, and risk attitudes, stress and uncertainty tolerance, need for autonomy, opportunity recognition and skill acquisition. Locus of

Control (LOC) is a construct that describes the extent to which individuals attribute outcomes to internal factors, such as effort and talent, or external factors, such as luck (Salmony, &. Kanbach, 2022).

Individuals also need to be motivated to found a new venture. This motivation comes from the individual's attitude, ability and aspiration of the individual or team to create new value or provide solutions to identified societal problems through engagement in nascent entrepreneurial behaviours. In addition, such individuals should have network contacts in order to have a greater resource multiplicity that would enable the individual or team to exploit the opportunities identified. Engel, Kaandorp, and Elfring (2017) go one step further and conceptualise entrepreneurial networking not as a mere facilitator of entrepreneurial action but as a part of the process. action. It is appreciated that factors that influence venture creation differ from one country to the other depending on the attitude, ability and aspiration of individuals or teams and the level of the nation's economic development which dictates the regulations that influence the creation of new ventures. A clearer understanding of these entrepreneurial traits and their heterogeneity may help to better match potential entrepreneurs to settings that are most closely aligned with their strengths.

Opportunity Recognition

One important area that poses a great challenge to venture creation is the ability to recognise opportunities in the environment that can be entrepreneurially employed. Opportunity recognition includes an individual's ability to recognise, discover or construct patterns and concepts and has been found that entrepreneurship education in higher education enhances the influence of opportunity recognition on entrepreneurial intention (Manesh & Rialp-Criado, 2019). There are two streams of arguments concerning the individual's role in opportunity search and discovery. One stream which is called the intentions model posits that individuals intend to be entrepreneurs before they even locate opportunities (Krueger, 1993). This implies that potential entrepreneurs must search for and discover opportunities and be prepared to seize them (Krueger & Brazeal, 1994). Such venture opportunities include marketing, franchising, distributions especially in the distributive trade which happens to be the first entrepreneurial choice, and any other attractive entrepreneurial activity that can lead to the creation of a potential venture. Thus, it is assumed that environmental scanning for possible opportunities naturally precedes exploitation through the vehicle of venture creation.

Another stream of argument, notably by the Austrian economists, assumes that markets are composed of people who possess different information (Hayek, 1945). The possession of this information motivates some people, searching for opportunities, to see particular opportunities others cannot see (Venkataraman, 1997, Kirzner,1997). Opportunity recognition can also take place externally in sad situations such as disasters and pandemics. In fact, factors such as personal, organisational and environmental as influencing

opportunity recognition (Gur et al., 2020, Filser et al., 2020). More so, an individual's ability to recognize, discover or construct patterns and concepts, under4stand the work of others through absorptive capacity facilitates opportunity recognition and exploitation. It has also been found that entrepreneurship education in higher education enhances the influence of opportunity recognition on entrepreneurial intention (Manesh & Rialp-Criado, 2019).

However, the decision to start a venture can be preceded by opportunities which are largely influenced by the entrepreneurs' persona1 and environmental circumstances. This can be achieved through perceiving connections between seemingly unrelated events or trends by "connecting the dots" between changes in technology, demographics, markets, government policies, and other factors (Baron (2006). The factors include idea generation, as exemplified through brainstorming, creative thinking, idea selection and development, expansion of the current range of ideas, asking more questions and adding more variables resulting in refined selection. The patterns lead to ideas and foundation for new products or services that can potentially serve as the basis for new ventures by integrating opportunity identification, alertness, prior knowledge of the industry and the market into the creation of new ventures. Hence, this paper posits:

H_o: Opportunity recognition does not significantly influence new venture creation.

Entrepreneurial Intention

Thompson (2009) suggests that entrepreneurial intention can be defined as "a self-acknowledged conviction by a person that they intend to set up a new business venture and consciously plan to do so at some point in the future. This is based on the popular theories of entrepreneurial intention is the Ajzen's (1991) theory of planned behaviour (TPB) which predicts entrepreneurial intentions most reliably through its ability to identify and predict entrepreneurial intention by considering both the social and personal factors The plank of the TPB argument is that intentions are influenced by three primary antecedents which are: (a) personal attitude toward outcomes of the targeted behaviour (PATB), (b) perceived subjective norms (PSNs) and, (c) perceived behavioural control (PBC). The actual behaviour is eventually influenced by intentions. Entrepreneurial intention in indicated by such proxies as self-motivation which includes the drive that leads people to take action in achieving a goal, high commitment, ability to set achievable goals, and family pressure. Other influencing factors include career progression, skill training and internship with the objective of attaining a professional status. Above all, there is the enterprise intention that relates to the intention of owning a business through individual personal entrepreneurial orientation. Entrepreneurial motivation is an important factor that contributes to the growth of entrepreneurial intentions.

According to Barba-Sabchez and Atienza-Shaquille (2017) two levels are involved in the decision to create business ventures-the rational level and the motivational level. The first level revolves around the opportunities provided by the environment while the second level refers to subjective reasons arising from the decision-maker's expectations. This intention

can be understood as a conscious, deliberate, and planned state of mind that precedes the action (Esfandiar et al., 2019). Thus, entrepreneurial intention can be described as a "self-recognized conviction" by any individual willing to start a new enterprise (Farrukh et al., 2018, Karimi et al. 2016, Gomez et al, 2021), and it is exemplified by internal locus of control, need for achievement, risk tolerance and entrepreneurial alertness leading to the creation of new business ventures.Prior studies have also found that the entrepreneurial intentions of individuals can be determined by factors relating to the environment or context, personal background (Georgescu & Herman, 2020). Individuals with an entrepreneurial background are therefore more likely to engage in entrepreneurial activities than others due to the influence of parental characteristics on children's aspirations and values coupled with the development of human capital (entrepreneurial skills.

Thus, the paper posits:

H_{01}: Entrepreneurial intentions do not have a significant effect on new venture creation.

Entrepreneurial Self-Efficacy

Whereas entrepreneurship education is a strong predictor of entrepreneurial intentions, another individual characteristic is self-efficacy which refers to the confidence one has in one's ability to attain outcomes on a given task. The concept of self–efficacy has been linked to Bandura (1977), who defines 'self-efficacy' as the individual's belief in his/her abilities and skills to complete a specific set of tasks and to undertake a job. He suggests four processes of an entrepreneurial self-efficacy to include: a) performance accomplishments, b) vicarious experience, c) verbal persuasion and d) physiological states or physiological arousal, thus through entrepreneurship education programme and can change with age and dedicated interventions. (Shaheen, & AL-Haddad, 2018, Bachmann et al. 2020).

Self-efficacy is exemplified by belief in one's capacity to handle the creation process, such as incubation, illumination, evaluation and implementation. This requires the formation of new ideas, acquiring both tacit and explicit knowledge, a positive mindset on the probability of successful positive outcome with the use of technology in managing the enterprise project. It is the perception of one's ability to convert ideas into expected outcome or the judgment on capabilities to organise and execute a particular course of action. A farther concept of 'Entrepreneurial self-efficacy' also relates to one's confidence in one's capability and skill to achieve the start-up advancement of any business and a person's belief in his or her potential to fruitfully launch a business venture (Shahab et al., 2018).

Some characteristics have been identified as being possessed by entrepreneurs with high self–efficacy) include risk and uncertainty management skills, innovation and product development skills, interpersonal and networking management skills, opportunity recognition, procurement and allocation of critical resource, and lastly development and maintenance of an innovative environment. These dimensions and factors have a high influence on entrepreneurial intentions. In addition, Shepherd et al., (2020) suggest the possession of "successful intelligence". for new-venture creation consisting of (a) practical

intelligence, which refers to the experience-based accumulation of skills, dispositions, tact knowledge, and the ability to apply some to solve everyday problems, (b) analytical intelligence, which is the ability to learn, remember, and retrieve information quickly and (c) creative intelligence, which is the ability to generate high quality novel ideas that meet the needs of a task or context. A high level of self–efficacy is a strong motivator in opportunity recognition which leads to the generation of business ideas and consequently venture creation.

Thus, this paper posits:

H_{02}- Entrepreneurial self-efficacy does not have significant effect on venture creation.

University Entrepreneurship Education

The UNESCO Declaration as contained in the Dakar Framework for Action on Education for All (2000) emphasised the need to give educational opportunity to all young people and adults in order to gain knowledge, develop their attitudes, values and skills to enable them build their capacities for work- related opportunities. The Global Entrepreneurship Monitor (GEM), (2010) defines entrepreneurship education as the building of knowledge and skills either "about" or "for the purpose of" entrepreneurship generally, as part of recognised education programmes at primary, secondary or tertiary-level educational institutions. The major objectives of entrepreneurship education as suggested by Usman, (2016) include the provision of meaningful education for youth to be self–reliant, embed them with training in skills that would make them meet the manpower needs and facilitate their capacity to identify and exploit new business opportunities through the creation of new ventures.

University Entrepreneurship Education programmes are represented by proxies such as internship focus, which translates training into practice, through the opportunity of learning company structure, opportunity to work on different projects, accessing professional leadership. Others include enrolling students in training/workshops, where they benefit from teaching and intensive group discussion, innovative courses, practical skill development, access to experts. One important aspect in contemporary university entrepreneurship literature, is the increased attention awareness being focused on Venture Creation Programmes (VCPs), which place great emphasis on experiential learning leading to the creation of new ventures. Full curriculum-based Venture Creation Programmes (VCPs) are full curriculum-based form of degree programme wherein students are made to explore the on-going creation of a new venture as a primary aspect of their formal study (Smith et al., 2022), notably on the identification of market opportunities.

The VCPs aim at equipping the students to identify and evaluate entrepreneurial opportunities, design a business model and proceed to write a business plan to exploit and launch the product to the market. It involves the participation of students in either an undergraduate or a postgraduate accredited programme of study through the active exploration of actual business start-up (Lackéus & Williams Middleton, 2011). This methodology is a highly contextualised experience, allowing learning activity to

synchronise with key moments in the venture development lifecycle (Bozward & Rogers-Draycott, 2020). Thus, this paper posits:

H_{o3}. University entrepreneurship education does not have a significant effect on new venture creation.

Entrepreneurial Skill Acquisition

Skills acquisition can be conceived as the ability to learn or acquire skills. It involves the development of a new skill and the practice of a way of doing things usually gained through training or experience, the ability to create something new with value through the exploitation of an idea by creating a business venture. It is also the ability to have self-belief, boldness, tenacity, passion, empathy, readiness to take expert advice, desire for immediate result (Nnebe, 2019. Ojubanire & Adegboyega, 2020). Entrepreneurial Skills in this sense include proxies such as promotional skills, (e.g. self-confidence, interpersonal skills. emotional intelligence, assertiveness, and executive presence), In addition, there is a great need for marketing, persuasion, service orientation, innovative skills (e.g. abilities to create and adapt to changes) networking skills, as exemplified through cognitive, behavioural and functional through association. University graduates are also expected to have the characteristics of observation, questioning and problem solving by providing valuable solutions to societal problems through strategic thinking and knowledge of complex situations.

In a recent study by Prufer & Prufer (2020), it was revealed that entrepreneurial skills have become even more significant than digital skills in the current work market, demanding an increasing research on entrepreneurial skills by researchers (Foreby et al.,2016; Mayanja et al., 2021; Yeganegi et al., 2019), because of the daunting challenges occasioned by the uncertainty, complexity and rapid technological changes, thereby necessitating the development of new entrepreneurial skills and abilities to be able to compete in a competitive environment. Generally, entrepreneurial skills can be used to describe all the "entrepreneurial abilities" such as "competencies" or "competences" and "capabilities" (Al Mamun et al., 2019; Boyles, 2012; Greblikaite et al., 2016; Prufer & Prufer, 2020; Ridho & Abdullah, 2020; Shabbir et al., 2019, Sudirman et al., 2020). Such skills include building and maintaining a network of contacts, through relationship management, communications skills, professionalism.

In order to participate actively in the new economy, university graduates in particular, are expected to possess the potential to build current competencies while also exploring new ones (Mayanja et al., 2021). This would certainly help to support entrepreneurial activities through the development of new ad-hoc upskilling plans for those facing a significant level of stress due to the new volatile, uncertain, complex, ambiguous (VUCA) environment (Rings & Rasinger, 2020). Prufer and Prufer (2020) identified eleven categories of entrepreneurial skills which include communication, planning and organising, flexibility,

collaboration, creativity, computational thinking, active learning and leadership amongst others.

Similarly, Gumel (2018) identity some skills necessary for the creation of new business ventures. Such skills, amongst others include creativity and innovation, alertness to be able to recognise opportunities, tacit knowledge for patterns and prototyping, domain knowledge, absorptive capacity, interpretation abilities and (e) market knowledge and resourcefulness. Other relatively important ones include risk-taking, judgment, self-efficacy, socialisation and networking. Thus, skill acquisition becomes an important contributory factor to economic growth as more young entrepreneurs are entering the market, creating many ventures and reducing unemployment (ILO, 2017) as well as increasing the link between entrepreneurship and economic development (World Bank,2018; Shabbir et al,2018). Universities, therefore, need to engender skills into future graduates which are not easily replicated through skilling, re-skilling and up-skilling. (Zimmerman, 2018). Therefore, this leads to the next hypothesis:

H_{04}. Entrepreneurial skill acquisition does not have a significant effect on new venture creation.

Risk Propensity

Risk Propensity can be described as the willingness of an individual to take risks in pursuit of identifying and exploiting an entrepreneurial opportunity**.** Risk-taking is the tendency of an individual, team and organisation to take initiatives and perform activities for uncertain results (Kallmuenzer & Peters, 2018). Most entrepreneurial studies have focused on Risk-taking propensity, which can be defined as an individual orientation toward taking Risks (Antoncic et al. 2018). It has been observed that Risk-taking propensity can change over the course of an individual's life, typically decreasing with age and in response to exogenous or emotional shocks (Mata et al. 2016, Schildberg- Horisch 2018).The current uncertain and rapidly changing business environments necessitate taking bold decisions to benefit from the unique unfolding entrepreneurial opportunities because of the additional advantage of paving the way for further opportunity exploitation through innovative skills (Belás et al., 2020).

Risk Propensity has proxies such as risk taking, (e.g. daring, engaging in activities with uncertain outcomes), decision making (e.g. making a choice out of many alternatives, by gathering information, to facilitate innovation), chances of success (e.g. potential eagerness to excel by knowing the desired outcome, commitment to a decision, positive visualization, resulting in positive actions). Risk prone people prefer outcomes with higher levels of uncertainty while Risk averse individuals prefer outcome that are certain (Ahmed, Khattak, |&Muhammad, 2020).

It is believed that individuals who possess positive risk appetite are considered as effectual because of their ability to make business decisions in uncertain environments even when a market does not seem to exist for their business ideas. However, it has been observed that

their decision to assume is dependent only to the extent to which they are prepared to take losses (Alsos et al., 2019). Hence, this paper posits:

H_{o5}. Risk propensity does not have a significant effect on venture creation by university graduates.

Moderating Variable-Effectuation

The theory of Effectuation in respect of Venture creation has become a highly influential cognitive science-based approach to understanding how nascent entrepreneurs start businesses in uncertain conditions (Kitching &rouse, (2020, Alsos et al., 2019). University graduates would be encouraged to create their new ventures through effectual logic so as not to be discouraged by the causal process of planning that can immediately highlight problem areas that can lead to delay. This approach requires entrepreneurs to think and act effectually, in order to increase their ability and capacity to create new ventures. The effectual logic is described as a type of reasoning which becomes useful to explore economic opportunity. (Sarasvathy, & Venkatarama (2011) Effectuation and effectual logic have been known as a method that explain the way entrepreneurs think about and pursue economic opportunity. Causal logic, as differentiated from effectuation, begins with having a single clear goal in mind, and striving to gather and deploy the required resources necessary to achieve that specific goal, while, effectual logic in contrast does not begin with a specific goal in mind, but with the resources within his control which can be readily deployed pursue a variety of new ventures with the expectation of successful outcomes.

The concept of effectuation according to Sarasvarthy. (2011) is based on five principles namely (a) the bird in the hand principle, (b) the affordable loss principle, (c) the lemonade principle, (d) the crazy quilt principle, and (e) the pilot in the plan principle. However, only two of the principles are considered for discussion. First, in the" bird in the hand" the entrepreneur may have a variety of resources which include access to capital, specialised knowledge, talent, insights to a specific industry, patents and other intellectual property, building of networks, among others. This principle places university graduates at advantage of starting their ventures effectually. Second, the "Affordable Loss Principle" admonishes nascent to be risk conscious by not risking more than they are willing to lose by considering the cost they are ready to forego. This would allow them the chance of exploiting other profitable opportunities. However, being regarded "Novice" entrepreneurs as it were, university graduates should not pursue all entrepreneurial opportunities at the same time.

Effectuation logic proxies include passion, (e.g., zeal, enthusiasm, intense emotion, strong feeling or excitement about something), hobbies as exampled in relaxation activities such as. creativity, learning, and gaming. There is also the desire to pursue knowledge, give undivided attention, enter business relationships with customers and other stakeholders, and business adaptation (business model in terms of strategy, structure and transactions so as to achieve competitive advantage, through alertness, timely decision making,

resourcefulness leadership skills, product adaptation. In the light of the above, this paper posits:

H_{o6}. Effectuation logic does not moderate significantly between university entrepreneurial traits and venture creation.

Theoretical Framework

The theoretical framework of the current research is based on the (Ajzen, 1991 theory of planned behavior (TPB). This theory states that intentions in general are driven from the individual's attitudes, social norms, and behavior, and, are predictors of actual behavior. A pivotal feature of this model is that modification in the planned behavior model is encouraged to expand the knowledge of different intentions (i.e., it is flexible model to embrace additional factors for a particular behavior). Hence, the model of current study uses effectuation as a moderator to bring a linkage between personality traits and entrepreneurial intentions because effectuation is considered an important factor in new venture creation.

Empirical Review

Awwad and Al-Aseer conducted a study in 2021 to investigate the impact of the Big Five personality traits on the entrepreneurial intentions of undergraduate university students in Jordan. The study adopted a survey design involving 323 students, and the responses were analysed using partial least square structural equation modeling (PLS-SEM). Findings revealed a positive relationship between conscientiousness, openness, alertness and entrepreneurial intention. Anwar and Saleem conducted a study in 2019 to explore the entrepreneurial characteristics among university students studying Business and in comparison, with non-business students in India. The study design was a survey involving 719 copies of questionnaire covering sis characteristics, namely, risk-taking propensity, innovativeness, locus of control, need for achievement, general self-efficacy and tolerance for ambiguity inquiring the students on what career options they would choose on graduation. Data were collected from three universities. Results of the t-tests revealed that higher levels of entrepreneurial characteristics were confirmed in business-inclined students.

Methodology

This study adopts a survey research design and quantitative in nature. The primary data were collected through the administration of questionnaire which were delivered in person by the authors and some Research Assistants. The questionnaires were administered from August 2022 to the first week of December 2022. The study which adopted a random sampling technique, was cross-sectional and collected quantitative data from students and graduates from 4 public and private universities in Kwara State, Nigeria using structured interviews.

Sample Selection

The study applied stratified random sampling method. Each of the universities was divided into faculties in order to cover all major departments. Outside universities, some graduates serving in the National Youth Service in the city areas were contacted during their Community Development assignments. Once their willingness to participate was confirmed, questionnaires were distributed, the authors visited the location at an agreed time for the collected of completed questionnaires.

Sample Size and Data Collection

A total of 400 questionnaires were administered to respondents and only 280 were returned. However, after the data screening process, 243 questionnaires were deemed usable. Thus, the response rate was 60.75%. Data were collected through self-administered close ended questionnaires. All questions were adapted from previous studies to ensure items' reliability and validity. Respondents were required to indicate their ratings based upon a five-point Likert scale, ranging from 1-Strongly Disagree to 5-Strongly Agree.

Instrument Validation

To ensure content validity, the instrument was evaluated by four academic experts in the field of Entrepreneurship. They suggested minor changes in the structure, layout and sentences of the items. Further, a pilot study was conducted on 20 post-graduate students of Kwara State University, Malete.

Data Analysis

This study employed Partial least square structural equation modeling (PLS-SEM) VERSION 4.0 to assess the measurement and structural models. PLS is considered as an appropriate technique because it simultaneously analyzes multiple relationships among the constructs (Hair et al., 2014) to test the proposed hypotheses.

Figure 1: Entrepreneurial Traits of University Graduates on Venture Creation Moderated by Effectuation Logics Path Model

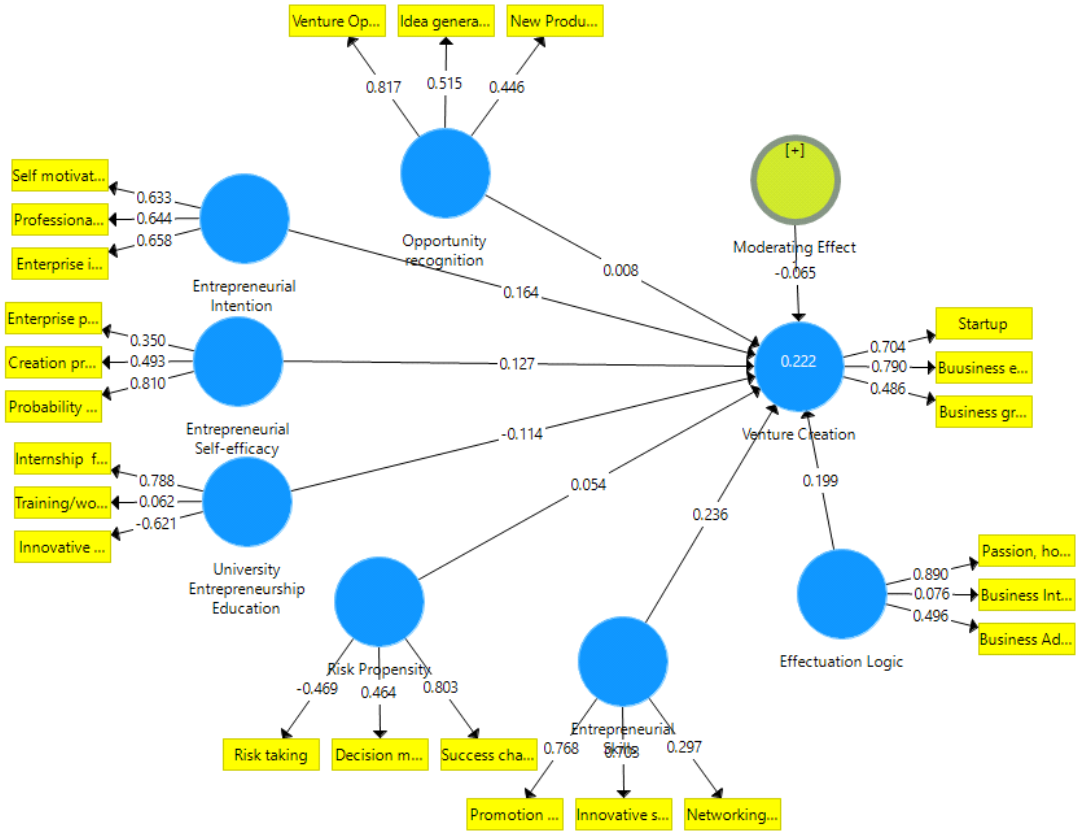

Figure 1: Entrepreneurial Traits of University Graduates on Venture Creation Moderated by Effectuation Logics Path Model

Source: Researcher's Path Model, 2023

Interpretation and Discussion

Figure 1 shows the path model analysis of the entrepreneurial traits of university graduates on venture creation moderated by effectuation logics. Entrepreneurial traits of University graduates measured in the study are Opportunity recognition - proxies by venture opportunities, idea generation, new product development; Entrepreneurial Intention - proxies by self-motivation, professional goal, enterprise intention; Entrepreneurial Self-efficacy - proxies by creation process, probability of success, enterprise project; University Entrepreneurship Education – proxies by internship focus, training/workshop, innovative courses; Risk Propensity – proxies by risk taking, decision making, chances of success; and Entrepreneurial Skills – proxies by promotional skills, innovative skills, networking skills.

These variables were measured on venture creation proxies by intention to start a business, business engagement, and business growth. The effect was moderated by the Effectuation logic proxies by passion, hobbies and interest, business interaction, and business adaptation to check if the moderating variables effect will be significant. The figure presents interaction effects where more than single variables contribute to the latent variables. The outer weight model varies from zero to an absolute maximum lower than 1, it has been established that the more the indicators for a latent variable, the lower the

maximum and the lower the average outer model weight. The results of outer model weights justify why the weak loading could not be dropped as all the loading weights were greater than or close to 0.50 except for the moderator. Also, these variables were major constituents of the latent variables from the literature.

The findings from the path coefficients table show a given standardization of weight ranging from -1 to +1 and the closeness of the weight to absolute 1 shows the strongest paths. On the other way round, weights close to zero reflect the weakest paths (Risher, 2018). University entrepreneurship education show a negative contribution to the poverty reduction while others show a negative contribution and all the social entrepreneurship variables is positive to moderating variable (real factors). The absolute magnitude of entrepreneurial skills and entrepreneurial intention gives a better coefficient.

The result also shows that the path coefficients moderated by effectuation logic shows weak standardized weight compared to the venture creation. This implies that all the variables identified are good model for the prediction of venture creation while the interference of the moderating variables is insignificant. The identified entrepreneurial traits of university graduates' metrics contribute significantly to the prediction of venture creation.

Table 1: R Square

Venture Creation	R Square	R Square Adjusted
	0.222	0.195

Source: SMARTPLS Output, 2023

The common effect size measure in the path with entrepreneurial traits of university graduates' factors shows the R square of 0.222 (i.e., 22.2%). This variation effect is relatively low which means that 22.2% of the variance in venture creation can be explained by the joint model of entrepreneurial traits of university graduates' metrics. Thus, this is a relatively low effect as the identified variables affect venture creation which implies that the remaining 87.8% is due to other variables not imputed in the model. Though, R-square greater than 80% suggests a possible multicollinearity problem (Tolerance = 1- R^2) in this case, there is no Multicollinearity problem as tolerance in this data set is greater than 0.10 at the extreme. However, adding predictors to a regression model tends to increase R^2. The adjusted R- square of 0.195 for venture creation is close to the unadjusted R square in this model because of the numerous numbers of variables involved in the model. This does not have any effect on the result output as the models were built from the literature.

Table 2: F-square

	Venture Creation
Effectuation Logic	0.047
Entrepreneurial Intention	0.031
Entrepreneurial Self-efficacy	0.019
Entrepreneurial Skills	0.065
Moderating Effect 1	0.005
Opportunity recognition	0.000
Risk Propensity	0.004
University Entrepreneurship Education	0.016
Venture Creation	

Source: SMARTPLS Output, 2023

The weight of these variables is shown in the f square table where the changes in contributions of entrepreneurial traits of University graduates metrics were revealed according to their importance. The f square result revealed the strength of the path in the change effect. The contribution changes of entrepreneurial traits of University graduates' metrics that are within the threshold of 0.03 are entrepreneurial intention, entrepreneurial skills, and effectuation logic while entrepreneurial self-efficacy, opportunity recognition, risk propensity, and university entrepreneurship education are outside the threshold and very low. The moderating effect change of 0.005 is insignificant.

F-square change effect shows that entrepreneurial skills and entrepreneurial intentions metrics are stronger to other metrics measured. The implication of this is that self-motivation, professional goal, enterprise intention, promotional skills, innovative skills, networking skills contribute most significantly to the change effect of venture creation in terms of intention to start a business, business engagement, and business growth. Thus, it is important for the sampled Universities to take these variables seriously in promoting venture creation.

Table 3: Bootstrapping coefficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Effectuation Logic -> Venture Creation	0.199	0.197	0.057	3.480	0.001
Entrepreneurial Intention -> Venture Creation	0.164	0.156	0.058	2.806	0.005

Entrepreneurial Self-efficacy -> Venture Creation	0.127	0.135	0.064	1.976	0.049
Entrepreneurial Skills -> Venture Creation	0.236	0.224	0.065	3.625	0.000
Moderating Effect 1 -> Venture Creation	-0.065	-0.126	0.118	0.549	0.583
Opportunity recognition -> Venture Creation	0.008	0.050	0.067	0.116	0.908
Risk Propensity -> Venture Creation	0.054	0.017	0.097	0.558	0.577
University Entrepreneurship Education -> Venture Creation	-0.114	-0.062	0.129	0.886	0.376

Source: SMARTPLS Output, 2023

The PLS bootstrapping output showing the t and p value revealed that any t value above 1.96 will be significant at 95% confidence interval and 5% significance level. From the output result, it was observed that moderating effect was not significant to venture creation. This implies that passion, hobbies and interest, business interaction and business adaptation influence on university entrepreneurship education does not propel university graduates to business startup, business engagement and business growth. But effectuation logics metrics used have a direct influence on venture creation i. e. passion, hobbies and interest, business interaction and business adaptation influence venture creation. Also, university entrepreneurship education, opportunity recognition and risk propensity indices were not significant to venture creation in the study area. This implies that venture opportunities, idea generation, new product development, internship focus, training/workshop, innovative courses, risk taking, decision making, and chances of success are variables to watch if venture creation must be improved.

On the other hand, entrepreneurial intention, entrepreneurial skills, entrepreneurial self-efficacy and effectuation logic metrics are all significant to venture creation. With this, the entrepreneurial traits of university graduates' metrics were all significant in predicting venture creation. It is sufficed to say that, venture creation of the sampled Universities is influenced by the identified entrepreneurial traits of university graduates' metrics i.e. self-motivation, professional goal, enterprise intention, creation process, probability of success, enterprise project, promotional skills, innovative skills, networking skills, passion, hobbies and interest, business interaction, and business adaptation are significant variables in predicting venture creation. All these entrepreneurial traits of university graduates' metrics are essential to enhanced intention to start a business, business engagement, and business

growth. This is a great convergence with prior expectation. Thus, when all these indices are effectively implemented, there is high tendency of for venture creation to increase. However, entrepreneurial traits of university graduates' metrics influence venture creation in Nigeria.

Conclusion

This study empirically analyses the underlying traits affecting the ability of university graduates with the purpose of strengthening their quest for engaging in entrepreneurial activity to alleviate unemployment. The most relevant conclusions are, first, that all the variables identified are good model for the prediction of venture creation, second, the variation effect of 22% is relatively low indicating that only 22.2% of the variance in venture creation can be explained by the joint model of entrepreneurial traits of University graduates' metrics, thereby implying that the remaining 87.8% is due to other variables not imputed in the model and, third, the interference of the moderating variables is insignificant. Even though our results are in line with prior expectation from the literature, they provide new evidence that some variables used in extant studies may not be sufficiently consistent with the realities in developing economies like Nigeria. Based on the results, therefore, we recommend an investigation into the other core underlying traits that may facilitate the development of graduate entrepreneurship in Nigeria.

Contributions

This study makes three major contributions to the existing research body, which enriches our understanding regarding entrepreneurial traits of university graduates, and effectual behaviors of potential graduate entrepreneurs. First, it provides the empirical evidence to support the theory of planned behavior to expand the knowledge regarding entrepreneurial traits and the intention to pioneer a new venture. Second, it provides ample evidence to the academics and practitioners to evaluate some of the popular entrepreneurial traits in the extant literature that have been regarded strong predictors of venture creation. Third, it will be useful for the policymakers to either imply the existing policies or restructure their policies keeping in view the findings of study.

Limitations and Future Research Directions

This study was limited to Kwara State in North-Central Nigeria and covering only four public and private universities as well as some university graduates within some cities in the state. In spite of the wide distribution of the questionnaire, few responses have been received from major cities outside the major commercial areas. Due to time and financial constraints, the authors could only use the field survey for data collection thereby missing the opportunity that could have been derived from a mixed-method. of Future research is recommended to further unveil other variables not captured in this study in order to refine the theoretical bases of the variables and improve the conceptual model.

References

Ahmed, M.A, Khattak, M.S | &Muhammad A (2020) Personality traits and entrepreneurial intention: The mediating role of risk aversion Authors. Journal of Public Affairs published by John Wiley & Sons Ltd, 2020. DOI: 10.1002/pa.2275

Antoncic J, Antoncic B, Gantar M, Hisrich RD, Marks LJ, Bachkirov AA, Li Z, Polzin P, Borges JL, Coelho A, Kakkonen M-L (2018) Risk-taking propensity and entrepreneurship: the role of power distance. J Enterp Cult 26(01):1–26

Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes,* 50(1): 179-211

Al Mamun, A., Fazal, S.A. and Muniady, R. (2019), "Entrepreneurial knowledge, skills, competencies and performance", Asia Pacific Journal of Innovation and Entrepreneurship, Vol. 13 No. 1.

Alsos G, Clausen T, Mauer R, et al. (2019) Effectual exchange: From entrepreneurship to the disciplines and beyond. *Small Business Economics*. Epub ahead of print 23 February. DOI: 10.1007/s11187-019-00146-9

Anwar, I., Jamal, M.T., Saleem, I. and Thoudam, P. (2021) 'Traits and entrepreneurial intention: testing the mediating role of entrepreneurial attitude and self-efficacy', J. International Business and Entrepreneurship Development, Vol. 13, No. 1, pp.40–60

Antoncic, J. A., Veselinovic, D., Antoncic, B., Grbec, D. L., and Li, Z. (2021). Financial self-efficacy in family business environments. J. Enterp. Cult. 29, 207– 219. doi: 10.1142/s021849582150014x

Arend R, Sarooghi H and Burkemper A (2015) Effectuation as ineffectual? Applying the 3E theory-assessment framework to a proposed new theory of entrepreneurship. *Academy of Management Review* 40(4): 630–651

Awwad, MS, and al-Aseer, RMN (2021) Big Five personality traits impact on entrepreneurial intention: the mediating role of entrepreneurial alertness –Asia Pacific Journal of Innovation and Entrepreneurship. Vol 15, No 1, pp87-100

Bachmann AK, Maran T, Furtner M, Brem A, Welte M (2020) Improving entrepreneurial self-efficacy and the attitude towards starting a business venture. Review Managagement Science p 1–21, 2020.

Baron, R A (2006) Opportunity Recognition as Pattern Recognition: How Entrepreneurs "Connect the Dots" to identify New Business Opportunities, Psycnet.apa.org. 2006 11426.006

Belas, J, Cepel, M, Kliuchnikava, Y &Vrbka(2020) Market risk in the SME segment in the Visegrad group countries. Transformation in Business & Economics 19(3C)678-693

Biswas, A. Verma, R.K (2021) Attitude and alertness in personality traits: a pathway to building entrepreneurial intention of university students. The journal of Entrepreneurship 30, (2) 367-396, 2021

Bozward, D &Rogers-Draycott, MC (2020) Value Creation Programmes: lessons for early–stage implementation, Entrepreneurship Education, 3, 287-310, 2020

Chen, G., and Shi, J. (2020). Effect mechanism of independence motivation and subjective norms on entrepreneurship intention. Sci. Res. Manag. 5, 269–278. Doi: 10.19571/j.cnki.1000-2995.2020.05.027

Çera, G., Mlouk, A., Çera, E., and Shumeli, A. (2020). The impact of entrepreneurship education on entrepreneurial intention. A quasi-experimental research design. J. Competitiveness 12, 39–56. Doi: 10.7441/joc.2020.01.03

Dada, E.A, Omotayo. A, Adegbuyi, A & Ogbari, M E (2023) Entrepreneurial Attributes and Venture Creation among undergraduate Students of Selecxted Universities in Southwest Nigeria. Administrative Sciences, 13 (8) 176, 2023

Duening, T.N, Shepherd, M.M & Czaplewski, A. J (2012) How Entrepreneurs Think: Why Effectuation and Effectual Logic May be the Key to Successful Enterprise Entrepreneurship, International Journal of Innovation Science**,** Volume 4 · Number 4 2012

Engel, Y., Kaandorp, M., & Elfring, T. (2017). Toward a dynamic process model of entrepreneurial networking under uncertainty. *Journal of Business Venturing*, 32: 35-51.

Ferreira JJM, Fernandes CI, Kraus S (2019) Entrepreneurship research: mapping intellectual structures and research trends. Rev Manag Sci 13(1):181–205

Goldberg LR (1990) An alternative "description of personality": The Big-Five factor structure. J Pers Soc Psychol 59(6):1216–1229

Greblikaite, J., Sroka, W. and Gerulaitiene, N. (2016), "Involving young people in polish and Lithuanian social enterprises by fostering entrepreneurial skills and abilities as entrepreneurial opportunity at university", Entrepreneurial Business and Economics Review, Vol. 4 No. 3, pp. 131-152, doi: 10.15678/EBER.2016.040310

Grégoire D and Cherchem N (2019) A structured literature review and suggestions for future effectuation research. *Small Business Economics*. Epub ahead of print 19 March. DOI: 10.1007/s11187-019-00158-5

Grossman, E. B., Yli-Renko, H., & Janakiraman, R. (2012). Resource search, interpersonal similarity, and network tie valuation in nascent entrepreneurs' emerging networks. *Journal of Management*, 38: 1760-1787

Gumel B. I (2018) Critical Factors Influencing Opportunity Recognition and Exploitation, *International Journal of Contemporary Research and Review*, Vol. 9, Issue. 04, Page no: ME 20748-20759 doi: https://doi.org/10.15520/ijcrr/2018/9/04/503 Page | 20748

Ibidunni, A S, Mozie, D, and Ayeni. Adebanji W, AA (2020) Entrepreneurial Characteristics among University Students: Insights for understanding entrepreneurial intentions amongst youths in a Developing country, Education and Training. Vol 63, No 1. Pp 71-84.

Ispir O, Elibol E, Sonmez B (2019) The relationship of personality traits and entrepreneurship tendencies with career adaptability of nursing students. Nurse Educ Today 79:41–47.

John, O. P., L. P. Naumann, and C. J. Soto (2008). "Paradigm shift to the integrative big five traits taxonomy: history, measurement, and conceptual issues". In: *Handbook of Personality: Theory and Research*. Ed. by O. P. John, R. W. Robins, and L. A. Pervin. New York: Guilford Press. 114–158

Kallmuenzer A, Strobil, A & Peters, M (2018) Tweaking the entrepreneurial orientation-performance relationship in family firms; "The Effect of Control Mechanisms and family-related goals" Review of Mangement Science, Springer, vol12(4) pages 855-883, October, 2020

Kerr, S.P, Kerr, W.R. &. Xu, T. (2018) *Personality Traits of Entrepreneurs: A Review of Recent Literature*. Foundations and Trends in Entrepreneurship, vol. 14, no. 3, pp. 279–356, 2018.

Kier, A. S., & McMullen, J. S. (2018). Entrepreneurial imaginativeness in new venture ideation. *Academy of Management Journal*, 61: 2265-2295

Kitching, J & Rouse, J (2020) Contesting effectuation theory: Why it does not *explain* new venture creation, International Small Business Journal: Researching Entrepreneurship 2020, Vol. 38(6) 515–535

Li, YY, Wang RX and Chi CY (2022) Who is more likely to start a business? Analysis of the factors influencing undergraduates' entrepreneurial intentions. Front. Psychol. 13:829955. Doi: 10.3389/fpsyg.2022.829955

Luke D & Bates S (2015) Using critical realism to explain indeterminacy in role behaviour systematically. Journal *for the Theory of Social Behaviour* 45(3): 331–351

Magd, H., Kunjumuhammed, S.K. and Thirumalaisamy, R. (2021), "Entrepreneurial skills in the new normal: a review of literature", Global Business and Management Research, Vol. 13 No. 3, 2021.

Mayanja, S., Omeke, M., Tibamwenda, J.V., Mutebi, H. & Mufta, F. (2021), "The mediating role of the novelty ecosystem between personality traits, entrepreneurial networks and entrepreneurial ambidexterity among small and medium enterprises", Journal of Global Entrepreneurship Research, Vol. 11, pp. 1-17.

Metallo, C, Agrifoglio, R, Briganti, P, Mercurio, L & Ferrara (2021) Entrepreneurial behaviour and new venture creation: The psychoanalytic perspective. Journal of Innovation & Knowledge 6 (1) 35-42, 202

Mubarak A, Irham MJ, Hartono S (2019) The influence of entrepreneurship characteristics and competencies on farmers' entrepreneurial intentions in the border region of North Borneo. IOP Conf Ser Earth Environ Sci 250(1):12–109

Nnebe, G (2019) Entrepreneurship Education and Skill Acquisition of Graduates in Public Universities South-East, Nigeria *International Journal of Business & Law Research 7(4):84-97, Oct. - Dec., 2019*

Ojubanire O. A. & Adegboyega S. A. (2020) Vocational Skill Acquisition and Venture Creation among Undergraduates in Osun State *Covenant Journal of Entrepreneurship (CJoE) Vol. 4 No.1, June 2020* ISSN: *p. 2682-5295 e. 2682-5309*

Pennetta, S Anglani, F & Mathews. S (2023) Navigating through entrepreneurial skills, competencies and capabilities: a systematic literature review and the development of the entrepreneurial ability model Journal of Entrepreneurship in Emerging Economies. Emerald Publishing Limited 2053-4604 DOI 10.1108/JEEE-09-2022-0257

Prufer, J. & Prufer, P. (2020), "Data science for entrepreneurship research: studying demand dynamics for entrepreneurial skills in the Netherlands", Small Business Economics, Vol. 55 No. 3, pp. 651-672, doi: 10.1007/s11187-019-00208-y.

Qureshi, M. S., & Mahdi, F. (2014). Impact of effectuation-based interventions on the intentions to start a business. Business Review, 9(2), 143-157. Retrieved from https://doi.org/10.54784/1990-6587.1277

Ridho, R.& Abdullah, A.G. (2020), "Improving the ability of entrepreneurs to use alternative learning models in the automotive field", IOP Conference Series. Materials Science and Engineering, Vol. 830 No. 4, p. 42089, doi: 10.1088/1757-899X/830/4/042089

Risher, J.J (2018) Marketing Reaearch in the 21st Century: Opportunities and Challenges. Brazilian Journal of Marketing-*BjMmkt*, Vol 17, 5, 2018.

Rings, G. & Rasinger, S. (2020), The Cambridge Handbook of Intercultural Communication, Cambridge University Press, Cambridge

Sahin, F, Karadag, H, & Tuncer (2019) Big five personality traits, entrepreneurial self-efficacy and entrepreneurial intention. International Journal of Entrepreneurial Behaviour and Research, 2019

Salmony, F.U &. Kanbach, D. K (2022) Personality trait differences across types of entrepreneurs: a systematic literature review: Review of Managerial Science 2022. 16:713–749. https://doi.org/10.1007/s11846-021-00466-9

Salisu, J. B. (2020). Entrepreneurial training effectiveness, government entrepreneurial supports and venturing of TVET students into IT related entrepreneurship - An indirect-path effects analysis. Heliyon 6: e05504. doi: 10. 1016/j.heliyon. 2020.e05504

Sarasvathy, S.D., & S. Venkataraman. (2011) Entrepreneurship as Method: Open Questions for an Entrepreneurial Future. *Entrepreneurship: Theory & Practice,* 35(1): 113-135.

Shepherd, D. A, Soutaris V, & Gruber M (2020) Creating New Ventures: A Review and Research Agenda, Journal of Management · January 2020, Vol. 20, No. 10, pp 1– 32

Shabbir, M.S., Muhammad. & Kassim, N. (2019), "Entrepreneur as an individual review of recent literature on entrepreneurial skills", Opcion, Vol. 35, pp. 582-599. Systematic literature review.

Singh, R H & Rahman, H (2013) International Journal of Scientific Research, Vol 2, Issue 11, 2013

Smith, K, Rogers-Draycott, M.C. & Bozward, D (2022). Full curriculum-based venture creation programmes: current knowledge and research challenges: International Journal of Entrepreneurial Behavior & Research Vol. 28 No. 4, 2022 pp. 1106-1127. Emerald Publishing Limited 1355-2554 DOI 10.1108/IJEBR-09-2020-0644

Sudirman, I., Siswanto, J. & Aisha, A.N. (2020), "Software entrepreneurs' competencies based on business growth", Journal of Research in Marketing and Entrepreneurship, Vol. 22 No. 1, pp. 111-132, doi: 10.1108/JRME-12-2017-0055

Surrender, Mor, Sonu Madan, & Ritu Chinikara (2020) The risk-seeking propensity of Indian entrepreneurs: A Study using GEM data Strategic Change 29 (3) 311-319, 2020

Tang, J. Y., Li, W., and Sun, B. D. (2020). Research on the factors influencing college students' willingness to start a business—based on research data from 13 universities in Shanghai. Mod. Bus. 6, 148–151. doi: 10.14097/j.cnki.5392/2020.06. 066

Thompson, E R (2009) Individual Entrepreneurial Intent Construction Classification and Development of an Intentionally Reliable Metric. Entrepreneurship Theory and Practice, 33, 669-694

Voda, A.I. & Florea, N (2019) Impact of personality traits and entrepreneurship education on entrepreneurial intentions of business engineering students. Sustainability 11 (4) 1192, 2019

Yeganegi, S., Laplume, A.O., Dass, P. & Greidanus, N.S. (2019), "Individual-level ambidexterity and entrepreneurial entry", Journal of Small Business Management, Vol. 57 No. 4, pp. 1444-1463, doi: 10.1111/jsbm.12405

Zhaoa, Y, Zhaob, X, Shic, J, Dud, H, Marjerisone, R.K & Pengf, C(2022) Impact of entrepreneurship education in colleges and universities on entrepreneurial entry and performance2022) Economic Research - Ekonomka Istrazivanja, 2022, Vol. 35, No. 1, 6165–6184 https://doi.org/10.1080/1331677X.2022.2048189