

## THE RELATIONSHIP BETWEEN ENTREPRENEURSHIP EDUCATION PROGRAM AND STUDENTS' ENTREPRENEURIAL ORIENTATION; A CONCEPTUAL FRAMEWORK

Shukurat M. Bello<sup>1</sup>, Muazu Hassan Muazu<sup>2</sup>, Rabiu Hassan<sup>3</sup>, Muhammad Yadudu<sup>4</sup>,  
Muhammad Baffa Sani<sup>5</sup>, Maryam Koko<sup>6</sup>

<sup>1,2,3,4,5</sup>Bayero University, Kano, Nigeria

<sup>6</sup>Usmanu Danfodio University, Sokoto, Nigeria

Corresponding email: <sup>2</sup> [muazumuazu@gmail.com](mailto:muazumuazu@gmail.com)

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### ABSTRACT

This study aims to study further by introducing a new variable (simulation technology) in the form of game-based learning on several existing models in the hope of increasing the effectiveness of the Entrepreneurship Education Program (EEP) in fostering university students. This study adopted a survey research design, using a collection method approach for data collection and analysis. Both students and the Director of the Center for Entrepreneurship Development have targeted respondents. The data collection instruments were questionnaires and interviews. Partial Least Square and NVIVO will be used for data analysis. The results of our analysis show that the entrepreneurial learning approach used in Europe, America, and Asia, and most of the findings show a positive variation in entrepreneurial orientation. This research will revive entrepreneurial learning by enhancing the EEP curriculum and teaching pedagogy to encourage entrepreneurial orientation aimed at creating new ventures, a decent work environment, and overall productivity.

### ABSTRAK

Penelitian ini bertujuan untuk mengkaji lebih lanjut dengan memperkenalkan variabel baru (teknologi simulasi) berupa game-based learning pada beberapa model yang ada dengan harapan dapat meningkatkan efektifitas Entrepreneurship Education Program (EEP) dalam pembinaan mahasiswa. Penelitian ini mengadopsi desain penelitian survei, dengan menggunakan pendekatan metode pengumpulan untuk pengumpulan dan analisis data. Baik mahasiswa maupun Direktur Pusat Pengembangan Kewirausahaan telah membidik responden. Instrumen pengumpulan data adalah angket dan wawancara. Partial Least Square dan NVIVO akan digunakan untuk analisis data. Hasil analisis kami menunjukkan bahwa pendekatan pembelajaran kewirausahaan yang digunakan di Eropa, Amerika, Asia, dan sebagian besar temuan menunjukkan variasi positif dalam orientasi kewirausahaan. Penelitian ini akan menghidupkan kembali pembelajaran kewirausahaan dengan meningkatkan kurikulum EEP dan pengajaran pedagogi untuk mendorong orientasi kewirausahaan yang bertujuan untuk menciptakan usaha baru, lingkungan kerja yang layak, dan produktivitas secara keseluruhan.



## INTRODUCTION

Entrepreneurship is viewed around the world as one of the engines that help in driving societal means of developing innovative solutions to socioeconomic problems. Entrepreneurial culture, therefore, is developed through education and training like many human endeavors. It is the expectation of all and sundry that investing in entrepreneurship education would bring about socio-economic development by way of starting innovative businesses and social ventures that would take societies to the promised land. That expectation attracts much interest in the practice of entrepreneurship in education, business, medicine, agriculture, policy-making, and the general livelihood of people seeking answers to the world's problems.

The entrepreneurship education program was introduced into the Nigerian tertiary education curriculum in 2012. Since then, a lot of investments were made by the government and its supporting agencies to promote entrepreneurship development in both formal and informal settings in the country. TETFund had provided N20m yearly entrepreneurship intervention fund to universities since 2013. Entrepreneurship scholars across the world developed entrepreneurship education models that are used in many countries which support SGD goals 4 and 8 of the United Nations. The entrepreneurship education program should involve students working collaboratively among themselves and with potential partners (Gelaidan & Abdullateef, 2017). Based on the assertions of Gelaidan and Abdullateef (2017) and Budiyo and Setyawasih (2018) one can deduce that teaching could be planned to stimulate students by providing an opportunity for them to engender practical business simulation that would enable them to construct and model businesses, create and reinvent ideas, conduct feasibility studies, prospect new business potentials and many other stimulating learning activities. Research has shown that the use of business plan simulation leads to a 70% rise in the likelihood of Malaysian undergraduate students preparing a bankable business plan (Guzairy, Mohamad & Yusuf, 2018).

Many research efforts (Lemu, Bell & Loon, 2018) were made to improve the effectiveness of entrepreneurship education programs in Nigeria over the years. It is painful to note that some of the practices that perverted the achievement of the program objectives persist. Considering the foregoing, this study, therefore, is proposing a simulation technology (game-based learning) variable that could improve the likelihood of engendering entrepreneurial orientation among Nigerian students. The introduction of the Entrepreneurship Education Program (EEP) into the Tertiary education curriculum was with the intention of developing entrepreneurial mindsets among students and graduates in Nigeria. Such innovation and creativity would help propel them to create ventures for self-reliance and employment opportunities for others in the country. However, the achievement of such objectives candidly relied on the effectiveness of the teaching approach, economic environment, and supportive government policies.

The effectiveness of entrepreneurship education is thus adjudged on the level of students' entrepreneurial intention, pro-activeness, attitudinal change, and business creation after graduation. The process of imparting knowledge to students has seen development over the years. Despite the evolvement, the current situation indicates that the timeframe of the learning is two hours per week in a session is considered inadequate for a 4-5 years degree program; the module contents are outdated and out of relevance for 21st-century entrepreneurship learning; the class size of entrepreneurship lectures is in the range of 200-1000 students; issues of non-continuous facilitators training is prevalent (Otache, 2019); method of teaching is mostly the conventional classroom teaching, as there are rarely any augmenting out-of-class activities to further support building student entrepreneurial orientation, intention and or business start-up skills. The EEP teaching is mostly tailored towards reading and passing examination only; teaching infrastructure is inadequate, you might find students using bare floors and, in some cases taking lectures through the windows because of the class size; most of the entrepreneurship

curriculum lacks local content and therefore could hardly suit the entrepreneurial need of a typical Nigerian student (Oluwa, Brijnal & Yan, 2020; Yatu, et al., 2018).

The current situation gives doubt one to argue about the effectiveness of the EEP program across Tertiary Institutions. This doubt creates an avenue for one to begin to ask questions as to whether the set objectives of the introduction of EEP into the Nigerian Tertiary education curriculum are achieved or not. It is on this note that many studies were conducted to propose solutions to these problems. Unfortunately, the problem persists. It is against this backdrop that this study intends to investigate further by way of introducing a new variable (simulation technology) in form of game-based learning in some of the existing models with the hope to improve the EEP effectiveness in building students' entrepreneurial orientation in the Tertiary Institutions. The specific objective of the research is to enhance entrepreneurship facilitation/learning that would help improve entrepreneurial orientation among Nigerian University students through simulation (game-based learning).

The overall objectives of this study include: (1) determining the extent to which enterprise game-based learning stimulates students' entrepreneurial orientation in Tertiary Institutions; (2) determining the extent to which Program context stimulate students' entrepreneurial orientation in Tertiary Institutions; (3) determining the extent to which functional characteristics stimulate students' entrepreneurial orientation in Tertiary Institutions; (4) determining the extent to which enterprise game-based learning mediates the relationship between entrepreneurship education and students' entrepreneurial orientation in Tertiary Institutions; (5) determining the extent to which entrepreneurship education affects game-based learning development.

## **LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT**

### **Entrepreneurship Education and Entrepreneurship Orientation**

Entrepreneurship has been recognized widely as an instrument for economic growth and social change (Budiyono & Setyawasih, 2018; Neneh, 2020). Entrepreneurship can be learned and taught; through entrepreneurship education (EE), students can study the factors that lead to business failures, develop entrepreneurial culture and choose a viable career option. EE is any pedagogical program or educational process to impart entrepreneurial attitudes and skills. EE is considered an effective strategy for more innovation; it can help promote entrepreneurial and innovative culture by changing mindsets and providing the necessary skills (Cho & Lee, 2018). There are various views regarding the dimensions of EE in different countries and endeavours. According to Valerio, Parton & Robbb (2014), EE has three dimensions: program context, participant characteristics and functional characteristics. However, their focus is more of those with existing enterprises who require training for expanding their businesses. Others like Muazu, Kofar-Mata, and Sagagi (2016) viewed it from the pedagogical perspective, curriculum, facilities, and facilitators' point of view. That education in whatever field of pursuit is centered on the method of teaching, the curriculum and the facilitator's capacity to deliver. In this study, the second perspective would be considered.

Moreover, in today's ever-changing business environment that is characterized by uncertainties and dynamism, the ability of entrepreneurs to develop new and distinct products is stimulated through entrepreneurial orientation (EO). The concept of EO is defined as the process through which organizations seek to develop a strategic basis for decision-making (Yatu, Bell, & Loon, 2018; Budiyo & Setyawasih, 2018). A process that enhances an individual's capacity to acquire entrepreneurial knowledge, raising awareness and understanding and providing an overall mental picture of entrepreneurship (Ikpesu, 2016). EO can be applied to both organizations and individuals. At the individual level, EO is characterized by five dimensions: competitive aggressiveness, autonomy, innovativeness, proactiveness, and willingness to take risks (Gelaidan & Abdullateef, 2017). Subsequently, Bolton and Lane (2012) developed a scale consisting of three dimensions – innovativeness, risk-taking, and pro-activeness. EO has been associated

with high-performing firms (Valerio et al., 2014), success factors to project management performance in the engineering of many countries (Sabahi & Paras, 2020), access to startup capital, access to business information and social networks (Sahoo & Panda, 2019).

According to Cho and Lee (2018), nonfinancial business performances are related to long-term goals and growth potential and therefore are influenced by innovative pro-activeness as it affects non-financial business performance. Thus, entrepreneurs should look for ways to promote their innovative pro-activeness. In this regard, therefore, entrepreneurship education should involve innovative pro-activeness for students to visualize opportunities to exploit, however it might not necessarily be applicable in the case of experienced entrepreneurs.

Entrepreneurial orientation is perhaps that mind-set that propel the development of innovative creation of new value streams. Miller (1983) proposed that successful businesses tend to show innovativeness, pro-activeness and risk-taking propensity. He named this construct the entrepreneurial orientation. Firms with entrepreneurial orientation try to identify and exploit new opportunities persistently, create new values and become leaders in markets. According to recent researches, like that of Cho and Lee (2018), entrepreneurial orientation is an important factor that led to the successful development of new products, high financial and nonfinancial business performance and high social performance. When it comes to student entrepreneurship education these traits could be generated and injected into the minds of students for prospective business start-up and performance.

### **Simulation Technology**

Computer-based, business simulations have had a long history in business education. Their efficacy has frequently been noted by educational scholars like Brooks et al. (2006). To improve poor learning outcomes, simulation-based learning- which emphasizes immersive hands-on and practice-based activities- is gaining acceptance in crucial subjects such as entrepreneurship (Panoutsopoulos, Lykourantzou & Sampson, 2011). Business Simulation games has been found to increase entrepreneurial competencies in Croatian High School Students (Barisic & Brovich, 2014). Similarly, Costin, O'Brien and Slattery (2018) have found the use of simulation and play based learning significantly improves entrepreneurial skills and mindset. This is corroborated by Cadotte (2014) who notes the impact of simulation-based learning on the pedagogy, Springer and Borthrick (2004) who notes that simulation-based learning emphasizes critical thinking and problem solving. For learning-by-doing type subjects such as entrepreneurship, the use of simulation enables the students to become active participants in the learning process and encourages students to synthesise and integrate what they read and make actual decisions based on facts or data presented in the case (Williams, 2011). That explains why and how the use of business plan simulation led to a 70% increase in the likelihood of the Malaysian undergraduate students writing an effective business plan. (Guzairy, et al, 2018).

### **Theoretical Framework**

The study considered the Experiential Learning Theory to explain the relationship between the proposed study variables. The game-based learning approach is developed from Kolb's learning model. The model consists of four connected steps: experience, reflect, conceptualize, and apply. During the first half of the cycle, learners test existing concepts and observe what happens through experience, gaining 'know-how.' In the second half of the cycle, learners reflect on their observations and construct new concepts— learning 'know-why' (double-loop learning). Then, learners develop 'mental models,' which are the assumptions and hypotheses about the world that they use to learn. Experiential learning entails more than simply gaining knowledge and skills. It's about providing entrepreneurs with thinking tools and frameworks to address changing conditions, rather than inflexible rules to follow, and allowing them to

test them out in diverse scenarios. It not only increases judgment and individual confidence, but it also facilitates learning and better embeds it in the individual (Hyams-Ssekasi & Caldwell, 2018).

### Conceptual Framework

The conceptual framework schematically describes the flow of linkages among the study variable. Therefore, Figure 1 below depicts graphically a conceptual model of what this study seeks to investigate.

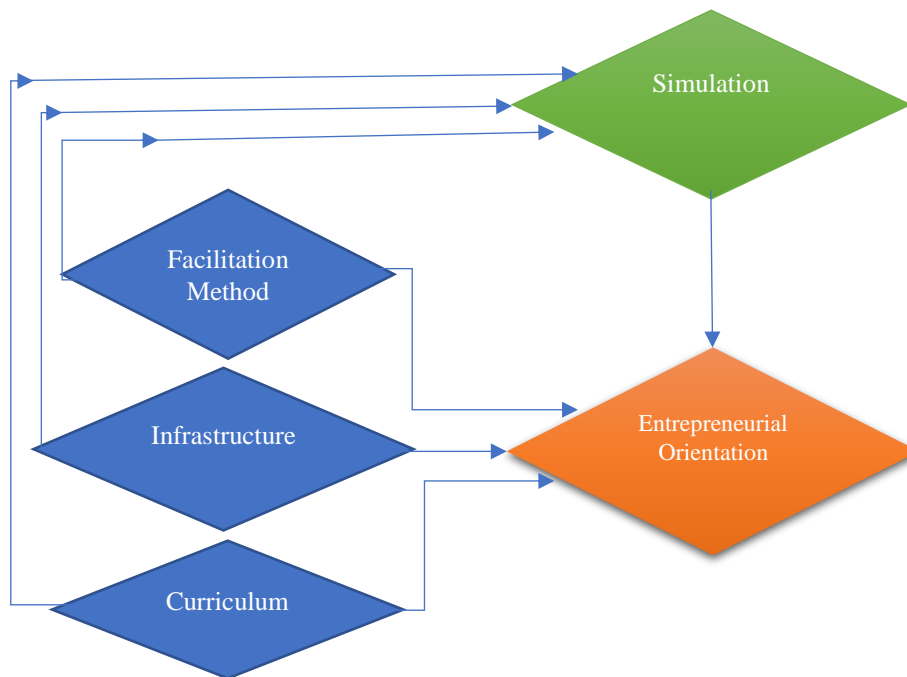


Figure 1: Proposed Conceptual Framework

## RESEARCH METHOD

### Research Design

The study proposes the use of survey research design, specifically Mixed Method - quantitative and qualitative. As evidence-based and innovative practices, interventions and programs are sufficiently complex that a single methodological approach is often inadequate (Palinkas et al., 2013). The mixed-method is preferable because it provides a better understanding of research issues than either qualitative or quantitative approaches alone. The study proposes the use of stratified multi-stage sampling techniques, where the target Tertiary institutes of learning to be covered are chosen based on certain strata. Specifically, they are chosen based on the cadre of education (University, Polytechnic, and College of Education) they provide and the existence of EEP teaching in the institutes. The second stage is that of the primary respondents, who are students, which are going to be chosen randomly, and the Directors of the Institutes' Entrepreneurship Development Centres (EDCs).

Since the research design is a survey, a mixed approach to be precise a questionnaire will be used as the instrument for data collection from the students. Whereas interviews would be conducted on the Directors of EDCs for the qualitative data collection. Data analysis, on the other hand, would be conducted using Partial Least Square (PLS-SEM) on the quantitative data collected from students and an NVIVO software would be used to analyze the data collected via the use of interviews with the Directors of EDCs.

What it means, is that data were not collected at this point of the article but a deeper review was conducted to show the antecedents of finding on the relationship between game-based learning and students' entrepreneurial orientation. Some of the findings are presented in a tabular form.

### **RESULT AND DISCUSSIONS**

The result is on the analysis of antecedents of studies conducted in the field of entrepreneurship education using a game-based learning approach to facilitate the teaching. As presented in Table 1, recent literature was reviewed to understand variables used to explain the relationship between game-based learning, entrepreneurial orientation, and entrepreneurship education. The recency of the various studies tells the trend of the application of the pedagogy in the facilitation of entrepreneurship and other skills in various specialties and how effective the game-based was founding building students' entrepreneurial orientation across the globe.

The result indicated that 85% of the research reviewed were conducted on colleges and universities students, 10% was on community participants of entrepreneurship training and 5% are business owners. The focus of the studies were mostly students, whom we feel occupy the young population with promising ideas of most economies. About 56% of the reviewed study were conducted in Europe and the Americas, 36% in Asia and 8% in Africa. What the contextual outcome of the study means is that African continent is still lagging in the adaption and use of gamification to complement the facilitation of entrepreneurship pedagogy in use. Rarely were any study conducted in Nigeria in the area of gamification Furthermore, 90% of the studies reviewed findings revealed that game-based learning has a significant and positive effect on students' entrepreneurial orientation and cause an attitudinal change in their predisposition to entrepreneurial opportunities.

**Table 1. Review Analysis of Research Antecedents on Entrepreneurship Education and Entrepreneurial Orientation**

Author(s)	Title of the Article	Journal	Variable	Methodology	Context	Findings
Yang (2020)	A Study of Entrepreneurship Education on Entrepreneurial Orientation of Korean and Chinese University Students: Focused on Entrepreneurial Self-Efficacy as Mediator*	Asia-Pacific Journal of Business Venturing and Entrepreneurship	Dependent: Entrepreneurial Orientation Independent: Entrepreneurship Education	The Data collected through survey was analysed using hierarchical multiple regression analysis with statistical software package software package (IBM SPSS statistics 23)	Korean and Chinese university students	The findings showed that entrepreneurship education works as a key predictor of entrepreneurial orientation
Alinezhad & Sajadi (2020)	Entrepreneurship Education and Gamification: An Analysis of Students' Learning Outcomes	Entrepreneurial Behaviour	Dependent: Students learning outcomes Independent Variable: Entrepreneurship Education	The study employed the systematic literature review method to examine the papers on the intersection between gamification and entrepreneurship education (EE)	80 papers were retrieved from Google Scholar, Web of Science and Scopus databases and 16 papers were included in the final analysis.	The majority of these studies suggested a positive association between gamification and students' ELOs
Chen et al. (2021)	Online and blended entrepreneurship education: a systematic review of applied educational technologies		Entrepreneurship Education			
Yen & Lin (2020)	Investigating the effect of flow experience on learning performance and entrepreneurial self-efficacy in a business simulation systems context	Interactive Learning Environments	entrepreneurial self-efficacy flow experience	Retail business simulation-based learning system VBR software was adopted	Taiwan	The results reveal that challenge-skill balance and playability play a critical role in enhancing flow experience and, consequently, in improving learning performance and entrepreneurial self-efficacy. T
Al-awlaqi et al., (2018)	Gamification of Entrepreneurship Education	The International Journal of Management Education	entrepreneurial self-efficacy. Entrepreneurship Education,	Online Venture Challenge was used to increase students' engagement and simulated learning	Canada	The assessment of student learning outcomes shows that the gamified approach enhanced

						students' experience, engagement, and entrepreneurial self-efficacy
Takemoto & Oe, (2021)	Entrepreneurship education at universities: challenges and future perspectives on online game implementation	Entrepreneurship Education	Entrepreneurial outcomes  Entrepreneurship education	The study applied an experimental game which the authors developed, and a mixed method was applied to the data sets collected from the students: an open-ended survey of 91 students and in-depth interviews with 23 students.		Gamification enables students to think critically on game scenarios via participation in gamifications, which can be strengthened and embedded in their mind by theoretical learning which follows the gaming activities. The findings of the study provide a practical guidance for entrepreneurship pedagogists with 'activities first' which will be followed by theoretical learning.
(Da et al., 2021)	Entrepreneurial Education and Individual Entrepreneurial Orientation: An Experts' Perspective An Empirical Delphi Study		Entrepreneurial Orientation  Entrepreneurship Education	The data were obtained from 16 academic experts, eight from South African universities and eight from Scottish universities. The data were analysed using thematic content analysis.	A Delphi study was performed to determine how the EE being received by university students, in the context of Scotland and South Africa, may influence them to choose an entrepreneurial career.	the results reveal that only three of the five IEO dimensions are prevalent when aligning to a student's entrepreneurial behaviour. The results also reveal that EE should ensure that practical teachings receive more attention than theoretical teachings.



(Ghanem, 2020)	The impact of promoting the concept of entrepreneurship in education colleges of different disciplines on entrepreneurial orientation	International Journal of Arts and Social Science	Entrepreneurial Orientation Entrepreneurship Education	a total of 152 students who took or did not take entrepreneurship courses in the college of education were surveyed through a the questionnaires,	Al Quds Open University Palestine	According to the results of the research, students having entrepreneurship skills are more thinking of starting their own business than those who do not have entrepreneurship skills. Entrepreneurship educators are more interested in starting their own business and intend to push.
Nair et al., (2020)	Role of entrepreneurial education in nurturing entrepreneurial orientation among engineering students	Asia Pacific Journal of Innovation and Entrepreneurship.	Entrepreneurial Orientation Entrepreneurship Education	Data was collected from 1,296 students who were enrolled with the two-year TEP during the academic year 2016–2018 using structured questionnaires. Multinomial and Ordinary Least Squares regressions were used to examine the hypotheses.	20 colleges in the Telangana state of India,	The findings of this study suggest that superior student performance in the programme is positively correlated with the students being hired by entrepreneurial firms.
Chen et al., (2021)	Online and blended entrepreneurship education: a systematic review of applied educational technologies	Entrepreneurship Education	Entrepreneurial outcomes from blended entrepreneurial learning Entrepreneurship Education	Based on five keywords, collating an initial set of 121 articles, this systematic review details the research outcomes of the resulting set of 38 published research articles/contributions, where each described a specific online and blended learning environment. We obtained and analyzed the following information from each of these articles: definition of entrepreneurship education, context of study,	The studies are scattered in Italy (5), USA (4), Taiwan, China (4), Malaysia (4), UK (4), Germany (2), Greece (2), Spain (2), Austria (2), Holland (1), Hungary (1), Switzerland (1), Romania (1), South Africa (1), Portugal (1), Ireland (1), Indonesia	In general, it was found that Wiki was used to discuss entrepreneurial concepts and that Facebook was the most common social software in entrepreneurship education. In terms of serious games, FLYGBY and SimVenture facilitated the gamification and enjoyment of entrepreneurship activities the most.

				methodology, applied technology, focused group, sample, outcome of entrepreneurship education and research rigor.	(1) and Russia (1).	
Efrata et al., (2021)	The Dynamics of Individual Entrepreneurial Orientation in the Relationship Between Entrepreneurship Education and Entrepreneurial Intention	Journal of Applied Management	Entrepreneurial Intention  Entrepreneurship Education	The model developed was tested on 231 management and business students who have completed an entrepreneurship education program in the university. The data obtained were processed using PLS-SEM statistical programming to evaluate the outer and inner structure of the model.	Indonesia	The findings succeeded in filling the void related to the study on the relationship dynamics between the dimensions forming individual entrepreneurial orientation.
Rodriguez & Lieber (2020)	Relationship Between Entrepreneurship Education, Entrepreneurial Mindset, and Career Readiness in Secondary Students	Journal of Experiential Education	Entrepreneurial mindsets  Entrepreneurship Education	A quasi-experimental design, entrepreneurial mindset was measured in two matched groups of students from underserved communities at the beginning and end of the school year. Additional analyses were conducted to assess the impact of career-focused education on student outlook of career readiness.	United States	Students in entrepreneurship education showed an overall statistically significant increase in entrepreneurial mindset, specifically in communication and collaboration, opportunity recognition, and critical thinking and problem-solving. Moreover, there was a positive association between entrepreneurial mindset gains and perceptions of future career success.

Geschichte & Orientwissenschaften (2020)	Effectiveness of Entrepreneurship Education on Entrepreneurial Orientation of Undergraduate Science Students in Rwanda	Thesis	Entrepreneurial Orientation  Entrepreneurship education	In this experiential and action research process, a mixture of qualitative, quantitative and observation methods were used for data collection. Targeted students were purposively selected from the final or prefinal years in departments of Civil engineering, Biotechnologies and Land Survey. They must have not attended any training in business skills development before.	The Institut d'Enseignement Supérieur (INES) de Ruhengeri is a higher education institution created in the year 2003. It is located in the Northern Province of the Republic of Rwanda.	Findings in the descriptive and inferential statistics showed a general positive trend in students' mindset change after training. Compared with how they ranked themselves before the training, the differences in the mean averages were positive in 18 out of 23 indicators in the CG.
Samašonok, K., Išoraitė, M., & Žirnelė, L. (2020).	Education of entrepreneurship by participation in a business-simulation enterprise activities: conditions of effectiveness and opportunities for improvement. Entrepreneurship and sustainability issues, 7, 3122-3144.	Business Simulation (IV); Entrepreneurial Orientation (DV)	entrepreneurship education; business simulation enterprise	Analytical descriptive, quantitative and statistical research methods were applied	Lithuania	It was found that by participating in the activities of business simulation enterprise, the students became more aware of the business, self-assessed and improved their business management skills and developed their personal entrepreneurial qualities
Zulfiqar, S., Sarwar, B., Aziz, S., Ejaz Chandia, K., & Khan, M. K. (2019)	An analysis of influence of business simulation games on business school students' attitude and intention toward entrepreneurial activities. Journal of Educational Computing Research	Simulations & Games (IV); Entrepreneurial Attitudes/Intentions (DV)		Technology Acceptance Model	China & Pakistan	The results show that all hypotheses have been proven by stating significant and positive students' attitude and intention toward entrepreneurial activities using business simulation games

Baruah, B., Ward, A., & Jackson, N. (2019, September)	On-line business simulation platforms for teaching entrepreneurship to engineering students in Higher Education.	Simulation Game (SimVenture) as the IV; Entrepreneurial Awareness/Intention as the Dependent Variable		Case Study Approach	College Students in United Kingdom	The findings from this study will help Higher Education Institutes (HEIs) and educators understand the benefits of blended teaching and learning strategies for entrepreneurship related curricula.
Toma, R. C., Mărgărit, G., Garais, G., & Matei, F. (2020).	E-learning platform for start-up simulation in life science and business field-a useful educational tool. Scientific Papers: Management, Economic Engineering in Agriculture & Rural Development	Simulation Game (as IV); and Start Up (as the DV)	start-up, education, e-learning, internet	Experimental Methods	College Students in Romania	The program improved the propensity of the students to start up new ventures, learn how to scale up existing ventures and how to consolidate
Grivokostopoulou, F., Kovas, K., & Perikos, I. (2019).	Examining the impact of a gamified entrepreneurship education framework in higher education. Sustainability, 11(20), 5623.	game-based learning (IV); Entrepreneurial attitude/intention (DV)	entrepreneurship education; virtual reality; learning technologies; gamification; learning efficiency; 3D virtual worlds	Experimental Study	Higher Education in Greece	The evaluation study revealed that the framework offers efficient gamified learning activities that increase students' motivation and assist in the formulation of entrepreneurship mentality, skills and competencies.
Antonaci, A., Dagnino, F. M., Ott, M., Bellotti, F., Berta, R., De Gloria, A., ... & Mayer, I. (2015).	A gamified collaborative course in entrepreneurship : Focus on objectives and tools. Computers in Human Behavior, 51, 1276-1283.	Simulation/Games as the (IV); Entrepreneurial Knowledge (DV)		Enhanced Learning, Serious Games, Entrepreneurship education, Gamification Higher education Collaboration	Spain, Italy and Holland	Gamifying the entrepreneurship education process helps students to become familiar, mainly through practice, with basic concepts of entrepreneurship and company management and to stimulate the emergence of

						their entrepreneurial attitudes.
Feșteu, D., & Turlakova, N. (2020).	Entrepreneurship Education Programme- Students'opinions . Bulletin of the Transilvania University of Brasov. Economic Sciences.	Game-based Modules (IV); Entrepreneurial Competency (DV)	Entrepreneurship Education, Higher education, Start-up	A transversal design,	Belarus, Moldova and Ukraine	The study concluded that game-based instruction is the preferred method of learning about entrepreneurship as was by conducting practical activities within a start-up centre.
Samašonok , K., Išoraitė, M., & Žirnelė, L. (2020).	Education of entrepreneurship by participation in a business simulation enterprise activity: conditions of effectiveness and opportunities for improvement. Entrepreneurship and sustainability issues,	Business Simulation (IV); Entrepreneurial Orientation (DV)	entrepreneurship education; business simulation enterprise	Analytical descriptive, quantitative and statistical research methods were applied	Lithuania	It was found that by participating in the activities of business simulation enterprise, the students became more aware of the business, self-assessed and improved their business management skills and developed their personal entrepreneurial qualities

The variables used for the explanation of variation in the entrepreneurial orientation of students in the reviewed studies were dominantly simulation, gamification, game-based learning, self-efficacy, entrepreneurship education, and flow experience, which represent 98% of the used variables. While 89% of the studies reviewed considered entrepreneurial orientation as; intention, attitude, knowledge, mindset and competency, only 11% used entrepreneurial orientation as dependent variable.

The methodology employed by most of the studies were survey, interview, thematic, experiential learning, transverse, case study and quasi-experiential, using SPSS, SEM, and Nvivo software for the analysis. 85% of the studies used SPSS, 10% used SEM and 5% utilized Nvivo for their analysis. It was found that rarely were any studies utilized a mixed method of analysis. It therefore means that the current study is on the right track to exploit the mixed method. The current findings from literature review succeeded in filling the void related to the study on the relationship dynamics between entrepreneurship education, game-based learning and students entrepreneurial orientation. Majority of the studies measured direct relationship between the study variable, which means the introduction of a mediator variable makes the current work unique.

## CONCLUSION

Issues related to the EEP discourse and its effectiveness on students' entrepreneurial orientation and some propositions were discussed. The relationship between game-based learning and entrepreneurial orientation is perceived to be positive, in the sense that once students are exposed to it, they learn more. It is expected that the findings of the study would instigate policy change towards entrepreneurship education curriculum, the facilitators could be sent for continuous capacity building to enhance their knowledge of entrepreneurship. The article buttressed on the need to consider simulation technology in the facilitation of EEP across Tertiary institutions in Nigeria. It would engender mastery of business start-up and management skills for growth, which the game could instill among students and faculties. The review showed that majority of the studies considered entrepreneurship education, self-efficacy, gamification, and business simulation as independent variables in the reviewed studies. The implication of the study findings is that entrepreneurial orientation of students could be developed through entrepreneurship education and can be complemented with the simulation or game-based learning. This study will help Higher Educational Institutes and educators understand the gains of employing blended teaching and learning strategies for entrepreneurship teaching and development. It is under the assumption, considering the antecedents of earlier studies, improved the propensity of the university students to start up new ventures, learn how to scale up existing ventures and how to consolidate most entrepreneurship skills learned.

## REFERENCES

- Budiyono, H. & Setyawasih, R. (2018). Entrepreneurial Intentions among Entrepreneurship Course Students Shaped by Individual Effects and Family Support. *Proceedings of the 1st International Conference on Recent Innovations (ICRI 2018)*, 2109-2119.
- Cadotte, E. (2014). The use of simulations in entrepreneurship education: opportunities, challenges and outcomes. In *Annals of Entrepreneurship Education and Pedagogy–2014*. Edward Elgar Publishing.
- Cho, Y. H., & Lee, J. H. (2018). Entrepreneurial orientation, entrepreneurial education and performance. *Asia Pacific Journal of Innovation and Entrepreneurship*, 12(2), 124–134.
- Costin, Y., O'Brien, M. P., & Slattery, D. M. (2018). Using simulation to develop entrepreneurial skills and mind-set: An exploratory case study. *International Journal of Teaching and Learning in Higher Education*, 30 (1), 136-145.
- Da, D., Teles, S., Nieuwenhuizen, C., & Schachtebeck, C. (2021). Entrepreneurial education and individual entrepreneurial orientation: An experts' perspective. *An Empirical Delphi Study*.
- Gelaidan, H. M., & Abdullateef, A. O. (2017). Entrepreneurial intentions of business students in Malaysia: The role of self-confidence, educational and relation support. *Journal of Small Business and Enterprise Development*, 24(1), 54-67.
- Guzairy, M., Mohamad, N. & Yunus, A. R. (2018). Enhancing student's understanding through business plan simulation in entrepreneurship. *MATEC Web of Conferences*, 150, 1-9.
- Hyams-Ssekasi, D., & Caldwell, E. F. (Eds.). (2018). *Experiential Learning for Entrepreneurship*. Palgrave Macmillan imprint is published by the registered company Springer International Publishing AG part of Springer Nature.
- Ikpesu O. C. (2016) University-industry linkages as determinant of students' entrepreneurial orientation in rivers state public universities. *Advances in Social Sciences Research Journal*, 3(13), 109–118.
- Miller, D. (1983). The correlatives of entrepreneurship in three types of firms. *Management Science*, 29 (7), 770-791.

- Muazu, M. H., Kofar-mata, B. A. & Sagagi, M. S. (2016). Capacity Building for Enterprise Development: An Assessment of Kano State Enterprise Development Training Institutes. International Conference on Business, Accounting, Finance and Economics (BAFE). 8-10th October, 2016 at Universiti Tunku Abdurrahman (UTAR) Malaysia.
- Otache, I. (2019). Enhancing the effectiveness of entrepreneurship education: the role of entrepreneurial lecturers. *Education+ Training*.
- Panoutsopoulos, H., Lykourantzou, M. A., & Sampson, D. G. (2011, July). Business simulation games as digital tools for supporting school entrepreneurship education. In 2011 IEEE 11th International Conference on Advanced Learning Technologies (pp. 155-156). IEEE.
- Sabahi, S., & Parast, M. M. (2020). The Impact Of Entrepreneurship Orientation On Project Performance: A Machine Learning Approach. *International Journal of Production Economics*, 226(4),
- Sahoo, S., & Panda, R. K. (2019). Exploring entrepreneurial orientation and intentions among technical university students: Role of contextual antecedents. *Education+ Training*.
- Springer, C. W., & Borthick, A. F. (2004). Business Simulation To Stage Critical Thinking In Introductory Accounting: Rationale, Design, And Implementation. *Issues In Accounting Education*, 19(3), 277-303.
- Valerio, A., Parton, B. & Robbb, A. (2014). Entrepreneurship Education and Training Programs around the World: Dimensions for Success.
- Williams, Dina (2011) Impact of Business Simulation Games in Enterprise Education. In: Paper presentations of the 2010 University of Huddersfield Annual Learning and Teaching Conference. University of Huddersfield, Huddersfield, pp. 11-20.
- Yatu, L., Bell, R., & Loon, M. (2018). Entrepreneurship education research in Nigeria: current foci and future research agendas. *African Journal of Economic and Management Studies*.

