

Moderating Role of Self-efficacy in the Relationship between Entrepreneurship Education and Venture Creation in Nigeria

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ABSTRACT.

Self-employment is top on Nigeria's national agenda because of the country's skyrocketing rate of unemployment, with the expectation that they may give alternative sources of employment. However, it is widely believed that university students' training has not successfully equipped them with the requisite skills and competencies necessary for venture creation. Therefore, this paper aims to examine whether students' self-efficacy could moderate the relationship between entrepreneurship education program and venture creation. 811 students were sampled from universities across Nigeria's North-Eastern and North-Western states. The study uses PLS-SEM to analyze the data. The results reveal that the relationship between perceived course content and venture creation among students is positive but insignificant. The relationship between perceived facilitators' competence and venture creation is also found to be positive and significant. In addition, the findings indicate that self-efficacy has a positive and significant moderating effect on the relationship between perceived delivery method and venture creation. The study concludes that facilitator's profile, delivery method and self-efficacy are essential determinants of venture creation for university students and graduates. Therefore, the study provides theoretical and empirical evidence to the earlier assumption that self-efficacy could strengthen the relationship between entrepreneurship education and venture creation.

Keywords: Entrepreneurship, self-efficacy, venture creation, course delivery, course content.

1. Introduction

Education remains the bedrock of civilization and a means of advancement in all societies. The literature indicates that

education is the pivot for socio-economic and political transformation at all times (Asaju et al., 2014; Belluigi et al., 2020;

Gautam et al., 2015). In Nigeria, like many other countries worldwide, policymakers have recognized the significance of education in national development. The inherent ability of entrepreneurship to drive economic growth and development, as well as an effective remedy for extreme hunger, social disparity, and poverty, necessitates the need for entrepreneurial development in Nigeria (Abdullahi et al., 2022).

Similarly, the government mandated entrepreneurship education in tertiary institutions through monitoring ministries and higher education institutions to achieve that goal (Agwu et al., 2017; Akarue & Adogbeji, 2014). However, the search for white-collar jobs and the country's high unemployment rate indicates that Nigeria's educational system lacks a critical component for avoiding the country's high unemployment rate (Emeh, 2012). Effective learning and teaching methods of entrepreneurship by entrepreneurship lecturers instill entrepreneurial competencies, skills and attitudes in students, motivating undergraduates for new venture creation (Fernando & Nishantha, 2019). Based on the preceding discussion and current realities, some gaps exist between developing student entrepreneurship education and converting it into new

venture creation. Moreover, young graduates must develop the entrepreneurial culture, attitude, and entrepreneurial career inspiration required for new venture creation.

According to Onuma (2016), the visible unemployment issue has been one of the most worrisome problems confronting Nigerian unemployed graduates. Therefore, students must prepare for the challenges by acquiring the necessary entrepreneurial skill for new venture creation. Studies indicate that people who start a new venture believe they have the necessary knowledge and skills (Bosma, 2013; Townsend et al., 2010). Thus, students' self-efficacy can strengthen the linkage between entrepreneurship education and new venture creation. Individuals' self-efficacy beliefs influence their choices, the amount of work they put into a task, how long they persist in the face of setbacks and failures, how resilient they are to adversity, and the degree of their successes. (Bandura, 1986). Entrepreneurial self-efficacy (ES) is the extent to which people think they possess the right skills for starting a new business. (Brice Jr and Spencer, 2007; Naktiyok et al., 2010).

While there are studies on entrepreneurship education and venture creation, graduate

unemployment is rising. The available literatures on entrepreneurship education (EE) and venture creation (VC) in Nigeria have largely overlooked the potential moderating role of self-efficacy on these two constructs. While others have explored the impact of EE on venture creation and the role of self-efficacy in entrepreneurial success, there exists a gap in the literatures with regard to the extent to which self-efficacy moderates the relationship between entrepreneurship education and venture creation in Nigeria. This gap highlights the need for further research to understand the complex interplay between entrepreneurship education, self-efficacy, and venture creation in the Nigerian context. Such research can contribute to develop more effective entrepreneurship education initiatives that recognize the role of self-efficacy in fostering entrepreneurial success.

There is a call for studies in the area to enable policymakers, higher education students and managers to be equipped with entrepreneurship knowledge and skills to establish new ventures. Similarly, the current study contributes by introducing self-efficacy in the relationship between EE and VC as a moderator. Based on the preceding discussion, the study will be an attempt to seek answers to the following

questions: does self-efficacy moderate the relationship between EE and VC? Hence, the study aims to explore the moderating effect of self-efficacy on the said relationship. Despite the growing interest in EE and its potential to promote venture creation, there is limited understanding on the role of SE in this relationship. This study therefore, is an attempt to fill the gap. By identifying factors relevant to the success of EE programs and the creation of new ventures, this study may help to the design of effective EE education initiatives in Nigeria and other similar contexts.

2. Review of Related Literature

2.1 Venture Creation

Being a dynamic process of creation, vision and transformation, venture creation plays an essential role in developing any country's economy, leading to structural changes in the business landscape and society at large (Nzewi et al., 2017). Similarly, Abdul (2018) suggests that venture creation involves identifying business opportunities and skills needed to be taught through a practical approach. Many studies have linked venture creation with the effective acquisition of entrepreneurship education from formal educational institutions like universities and other higher learning

institutions (Alberti et al., 2004; Kirby, 2004). Thus, the university campus should serve as a playground or incubation center for entrepreneurial students who want to test their business concepts and transform them into successful business ventures (Olokundun et al., 2019). Scholars have expressed conflicting views on whether ventures are objective phenomena that exist independently (Shane & Venkataraman, 2000) so that the individual and venture depend on each other (Sarason et al., 2006). Also, academics in the fields of entrepreneurship, science policy, innovation, technology transfer, regional development, and business innovations based on university knowledge. (Rasmussen, 2005). From the preceding discussion, entrepreneurial education serves as a gateway to change of entrepreneurial mindset and behavior, leading to venture creations (Jabeen et al., 2017).

2.2 Entrepreneurship education (EE)

EE is crucial for preparing and expanding one's perspectives to become a creator, risk-taker innovator, venture owner and manager of economic resources. (Udoeye & Mba, 2018). Thus, it promotes innovation, self-confidence or efficacy, and entrepreneur growth. Similarly, Okoye (2017) suggests that the main goal of EE is to enable

students to acquire creative thinking, original ideas, talents, and managerial competence to build and run successful companies and become independent. Evidence shows that entrepreneurship education is limited to formal learning; however, this gap must be bridged because entrepreneurship education is not limited to formal part of education (Agwu et al., 2017; Gorman et al., 1997). However, it can also be a life-long training process that does not require a formal educational establishment. Rather, it is based on a combination of formal and informal learning processes (Colardyn & Bjornavold, 2004; Strimel et al., 2014). Studies indicate that EE is a critical source of human capital and will play an important role in providing individuals with opportunities to improve their entrepreneurial abilities, dispositions, and limits leading to new venture creation (Baron and Ensley 2006; Hmieleski et al., 2015).

2.3 Self-efficacy

Self-efficacy is defined by Bandura and Walters (1977) as an individual's opinion of their capacity to organize and execute the actions required accomplishing different performance outcomes. The construct of self-efficacy has been commonly used as an individual difference variable in psychology

(Kickul & D'Intino, 2005). Through education and life experience, one gradually develops complex social, cognitive and linguistic skills (Gist, 1987; Bandura, 1982). Self-efficacy affects people's feelings, thoughts, behaviors, and motivation, according to Bandura's (1995) theory. Feelings are linked to a low sense of self-efficacy. According to the literature, developing task competencies and skills based on performance and accomplishments in the past boosts self-efficacy and encourages future performance and higher goals (Herron & Sapienza, 1992). Therefore, SE has significant practical and theoretical implications for entrepreneurial success since starting a business requires a specific set of skills and talents (Kickul & D'Intino, 2005).

2.4 Entrepreneurship Education and Venture Creation

Several studies have supported the positive linkage between EE and venture creation. For example, Agwu et al. (2017) suggested that aspects of EE like opportunity identification, leadership, innovative thinking and problem-solving have a substantial impact on the establishment of new ventures. Similarly, Entrepreneurship skills can be acquired through entrepreneurial outreach programs,

entrepreneurial educational scope, and vocational training (Jones et al., 2012; Agwu et al., 2017) and can lead to venture creation among the participating students after graduation. Again, Wahidmurni et al. (2019) indicate that entrepreneurial learning could motivate students to identify new venture opportunities.

However, Westhead and Solesvik (2016) also ask, whether universities that require entrepreneurship education for business students increase entrepreneurial intent leading to venture creation. Thus, students of entrepreneurship education have shown high goals, but not all participants benefited equally from the program. Moreover, female students who took entrepreneurial courses reported high intention far less frequently. The lack of comprehensive educational objectives, techniques, content, and resources necessary to facilitate the development of entrepreneurs for venture formation also undermines efforts and policies to encourage entrepreneurial attitudes and behavior among graduates. (Fayolle & Gailly, 2015; Finardi, 2013; Nabi et al., 2017, 2018). Despite these inverse views, studies confirm that university graduates were potential entrepreneurs, with a greater proclivity for new venture creation than non-graduates (Zainuddin, 2012).

Hence, the following hypotheses have been formulated:

H1: Entrepreneurship education is significantly associated with venture creation.

H1a: Perceived relevance and adequacy of course content is significantly related to venture creation.

H1b: Perceived facilitators' competence has a significant relationship with venture creation.

H1c: Perceived delivery method is significantly related to venture creation.

2.5 Moderating effect of self-efficacy

Many studies view venture creation as planned behavior (Al-Jubari et al., 2019), and SE is a key determinant and component of such behavior (Fuller et al., 2018; Ibrahim et al., 2019). Because entrepreneurship is a process that can help with SE and control of venture creation, the importance of EE is based on the idea that it can be learnt (Ahmed et al., 2017; Othman and Nasrudin 2016). Researches suggest that the social learning theory (Wood & Bandura, 1989; Bandura, 1982), which sees people's behaviors as the outcome of reciprocal causation among cognitive, behavioral, and

environmental variables, is the foundation for the concept of SE (Chen et al., 1998). Also, some scholars contend that EE and entrepreneurial SE are closely related (Dickson et al., 2008; Muofhe and Du Toit, 2011). Scholars contend that specialized teaching strategies used by entrepreneurship educators are essential for improving students' perceptions of their SE (Zhao et al., 2005).

Also, the starting a new business by graduates who studied entrepreneurship is directly related to SE (Blackford et al., 2009). The decision to launch a new enterprise and the efficiency with which those ventures are managed can be influenced by their level of entrepreneurial self-efficacy (Forbes, 2005). Students gain firsthand experience via case studies and role models, which increases their confidence in launching a new venture (Laviolette & Radu, 2008). Scholars maintained that EE positively impacts the antecedents of entrepreneurial self-efficacy (Fayolle et al., 2006; Guerrero et al., 2009) and promotes graduates to embark on new venture creations (Jones et al., 2008; Souitaris et al., 2007). In support of this study's use of SE to strengthen the relationship between EE and VC, much previous research used self-efficacy as

moderating effect with related constructs. For example, Sari (2016), Claudia and Murniati (2018) and Niemiec and Lachowicz-Tabaczek (2015). Hence, the study formulates the following hypothesis:

H2: Self-efficacy significantly moderates the relationship between entrepreneurship education and venture creation

H2a: Self-efficacy significantly moderates the relationship between perceived relevance and adequacy of course content and venture creation.

H2b: Self-efficacy significantly moderates the relationship between perceived facilitators' competence and venture creation.

H2c: Self-efficacy significantly moderates the relationship between perceived delivery method and venture creation.

2.6 Theoretical framework and research model

The Theory of Planned Behavior (TPB) and the experiential learning theory are the theories used to underpin this study. The theories assume that behaviors are affected by a combination of three factors and are subject to change. Attitude toward the behavior, subjective norms, and perceived behavioral control are the three factors assumed (Ajzen, 1991). According to the TPB, any intention to engage in any behavior explains the behavior. According to

Fishbein and Ajzen (1975), a person's desire to engage in a specific or certain behavior or activity depends on the three factors as mentioned before (ATB, SN and PBC). TPB posits that people's deliberate behaviors are direct result of ATB, SN and PBC and as such it establishes a link between intention and behavior. According to the theory, an individual's intention to engage in a given behavior increases when ATB, SN, and PBC increase (Appiah-Nimo et al., 2018). Accordingly, it can be inferred from the TPB that students are more likely to take entrepreneurial activity that leads to the formation of new ventures if their ATB, SN, and PBC are more positive toward their entrepreneurial intention.

TPB assumes that an individual's intent to engage in a certain type of particular behavior such as venture creation is influenced by the three factors mentioned earlier. SE is a related construct that refers to a person's belief in their ability to perform a certain task or specific behavior successfully. In context of entrepreneurship, SE refers to an individual's belief in their ability to start and run venture successfully.

EE is often aimed at increasing individuals' knowledge and skills related to entrepreneurship. The TPB suggests that such education can positively influence

ATB, SN, and PBC, which, in turn, can increase the intention to start a venture. In addition, the TPB suggests that SE plays a critical role in the formation of behavioral intentions. Specifically, individuals with high levels of SE are more likely to have positive attitudes, perceive more support for their actions, and may have a higher sense of control over their behavior.

Therefore, the TPB supports the relationship between SE, EE, and VC by suggesting that entrepreneurship education can increase individuals' self-efficacy in starting and running a successful venture. By providing individuals with the knowledge and skills needed to succeed in entrepreneurship. Education can increase individuals' confidence in their ability to perform the necessary tasks. Higher levels of SE lead to positive attitudes towards entrepreneurship

which also increases the intention to start entrepreneurial activities. EE can also increase the perception of social support for entrepreneurial activities and the sense of control over the behavior, which, in turn, can increase the intention to engage in entrepreneurial activities.

The intention to start entrepreneurial activities strongly predicts actual VC, which suggests that higher levels of SE resulting from EE can ultimately lead to increased venture creation. In summary, the TPB supports the idea that EE can increase SE, which, in turn, can positively influences ATB, SN, and PBC, and ultimately the intention to start up entrepreneurial activities and VC.

Based on the foregoing, the study proposes the model in figure 1

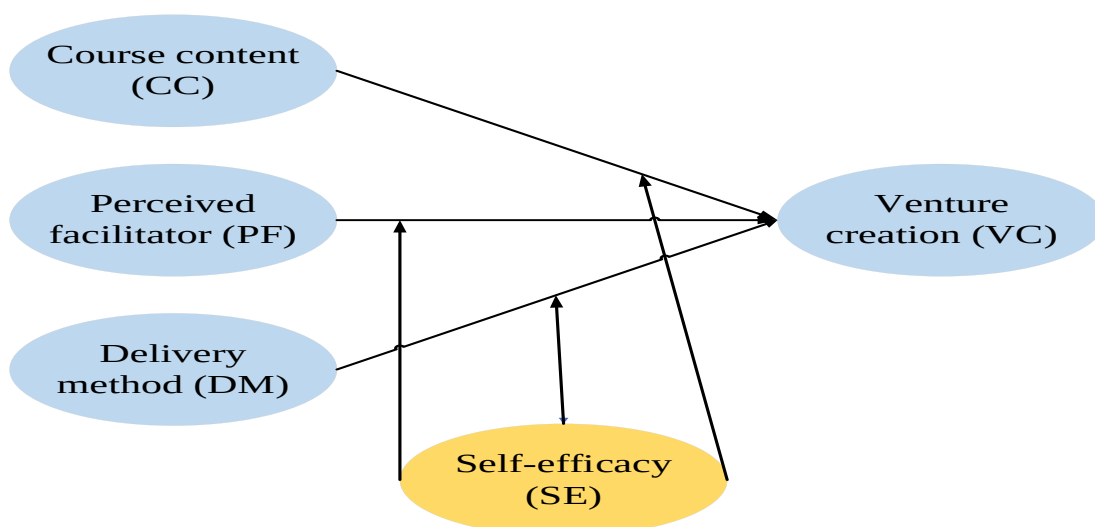


Figure 1: Proposed model

3. Methodology

The study utilizes a survey design to collect data from the respondents. The population of the study consists of level 400 students and graduates who have participated in the EE Program in the ten public universities across North-East and North-West regions of Nigeria. The population of the students is estimated to be more than thirty thousand (30,000) across the universities. Using Krejcie and Morgan (1970), the sample size is 379. Therefore, the research tripled the sample size to 1,137 to reduce sampling error and achieve more generalizable findings (Bartlett et al., 2001; Groves, 2006). From the 1137 questionnaires distributed, 326 are not correctly filled and subsequently dropped, leaving the study with 811 for the analysis. Convenience and snowball sampling procedures were used for the study. This is because the target population was difficult to access due to geographical, social, financial constraints. In such situations, researchers may opt for convenience sampling as it allows them to work with the available and accessible participants. The snowball method enabled the researchers to be connected with other respondents. The Partial Least Square Structural Equation Modeling is utilized with the aid of Smart PLS 4 to analyze the

data and test the hypotheses.

3.1 Measures

The independent variable, the EE program, is measured by course content, facilitators' competence and delivery method. The measures for perceived relevance and adequacy of the course content (CC) are adapted from Mwasalwiba (2010) using ten (10) items. Perceived facilitator competence (FC) is measured using eleven (11) items adapted from Jhang (2020) and Huang et al. (2020). Similarly, the perceived delivery method (DM) is measured with seven (7) items adapted from NIRAS and Thorgård (2008). The dependent variable, Venture creation, is measured using thirteen (13) items adapted from Gatewood et al. (1995). Finally, the moderating variable, students' self-efficacy, was measured using four (4) items developed by Zhao et al. (2005). The scale used to measure the constructs is a five-point Likert scale which range from strongly agree (1) to strongly disagree (5).

4. Results and Discussions

4.1 Reliability and Validity

This section presents and discusses the outer loadings results, AVE values and composite reliability of all the constructs under review. The decision criteria for outer loadings is 0.70, meaning indicators with loadings

below the threshold could be deleted if the deletion can increase the reliability of the constructs under review Hair et al. (2017). However, some scholars argued that outer loadings of 0.4 can be considered reliable in some cases. As shown in figure 2, the values of the AVE are within the range of 0.500 to

0.72, while the values for consistent composite reliability were also within the range of 0.66 to 0.90, and the Cronbach's Alpha values were within the range of 0.627 to 0.893, which shows that the constructs have convergent validity.

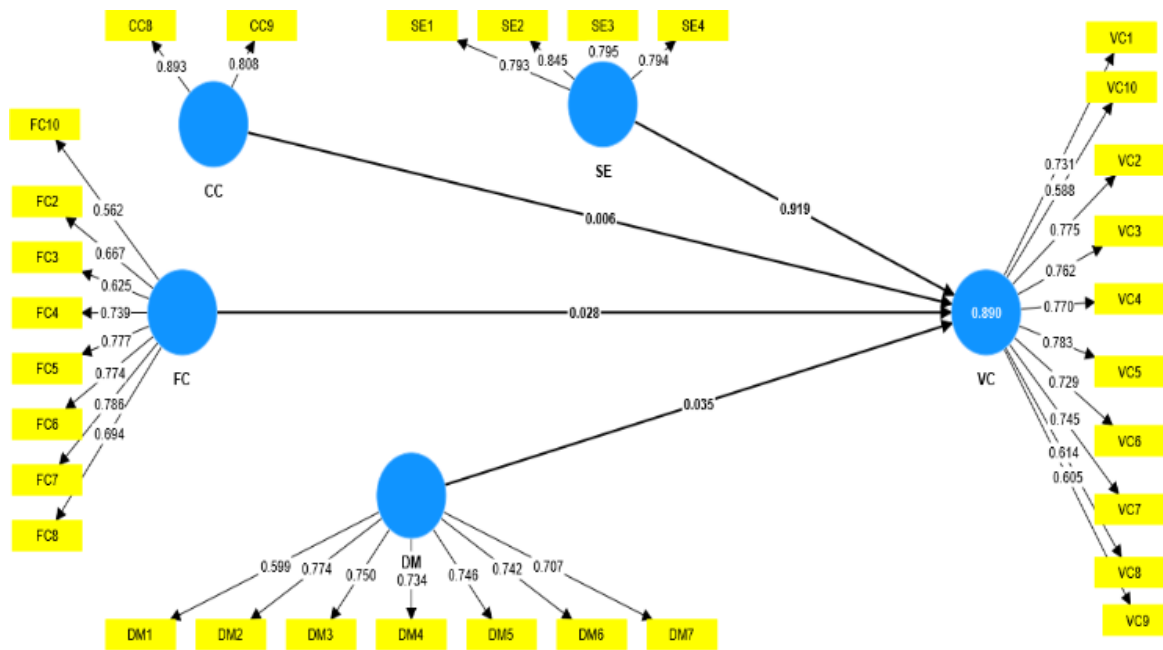


Figure 2: Measurement model

Figure 2 shows that three items (FC1, FC9 and FC11) from facilitator's competence are deleted because their outer loadings are less than the acceptable threshold. Similarly, three items (VC11, VC12 and VC13) are deleted from venture creation for a similar reason. Only two items are left for course content because their loadings were acceptable. However, no item is deleted

from the self-efficacy and delivery method because all their loadings are acceptable.

For the constructs discriminant validity, we use the Heterotrait-monotrait (HTMT) criterion. Henseler et al. (2015) state that HTMT is a superior ratio to the Fornell-Lacker and the cross-loading criterion due to its higher specificity and sensitivity rate.

Table 1: HTMT criterion

HTMT criterion	CC	DM	FC	SE	VC
Course content					
Delivery method	0.822				
Facilitators' competence	0.692	0.566			
Self-efficacy	0.457	0.349	0.379		
Venture creation	0.458	0.383	0.380	0.89	

Table 1 presents the HTMT ratio for the constructs. HTMT values close to 1 represent a lack of discriminant validity; hence scholars Kline (2011) and Gold et al. (2001) suggest a threshold of 0.85 and 0.90. Table 1 shows that the highest value of 0.822 is below the HTMT 0.85, indicating no multicollinearity among the variables, as

Gold et al. (2001) argued.

4.2 Structural model evaluation

This section presents the test of hypotheses, R-squared (R^2) and model effect size (F^2) values. The p-value at 5% level of significance is used to accept or reject the hypotheses, as depicted in Table II.

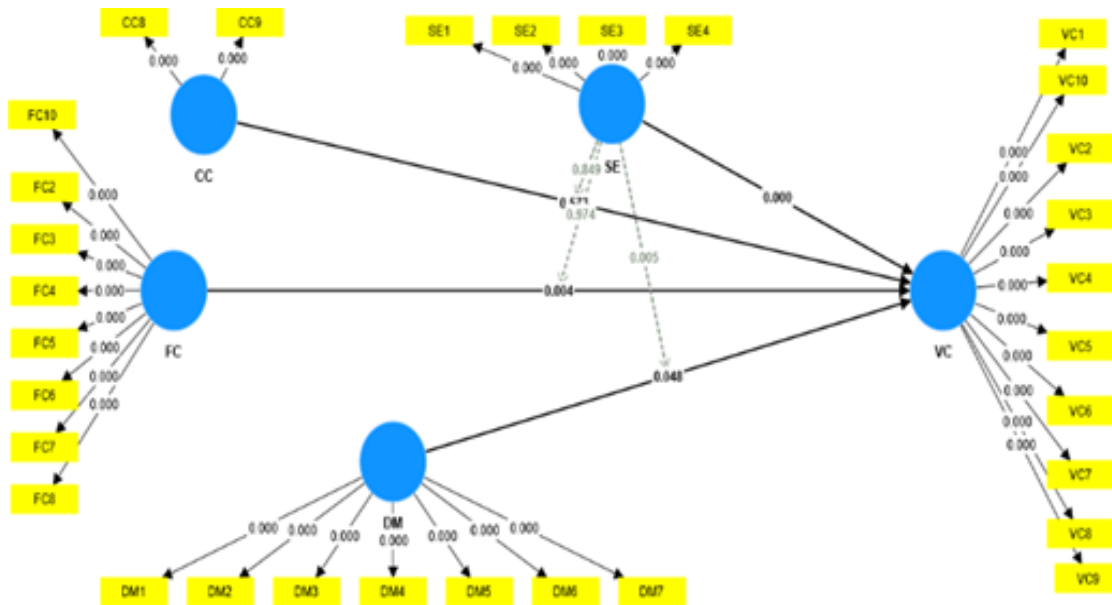


Figure 3: Structural model

Table II: Structural model results: Direct and indirect relationship

Relationships	Original sample (O)	S.D.	T statistics	P values	Decision
CC -> VC	0.01	0.019	0.563	0.573	Not supported
DM -> VC	0.035	0.018	1.979	0.048	Supported
FC -> VC	0.043	0.015	2.844	0.004	Supported
SE -> VC	0.92	0.007	123.73	0.000	Supported
SE x CC -> VC	-0.003	0.018	0.19	0.849	Not supported
SE x FC -> VC	0	0.015	0.032	0.974	Not supported
SE x DM -> VC	0.05	0.018	2.781	0.005	Supported

As depicted in both table II and figure 3, the relationship between perceived course content and venture creation among students is positive but insignificant, with a p-value of 0.573 and a beta value of 0.01. Perceived facilitators' competence and venture creation have a positive and significant relationship with a p-value of 0.04 and a beta value of 0.043. Similarly, the results reveal that perceived delivery method and venture creation among students have a positive and significant relationship, with a p-value and beta value of 0.035. This finding corroborates previous studies (Agwu et al., 2017; C. Jones et al., 2012; Wahidmurni et al., 2019), which have established a positive linkage between EE and VC. Furthermore, the results reveal that SE and VC have a positive and significant relationship with a p-value of 0.000 and a beta value of 0.92. It

is also found out that self-efficacy positively and significantly moderates the relationship between perceived delivery method and venture creation with a p-value of 0.005 and a beta value of 0.05. This finding is consistent with previous studies by Sari (2016), Claudia and Murniati (2018), Claudia and Murniati (2018) and Niemiec and Lachowicz-Tabaczek (2015), which use self-efficacy as a moderating variable.

4.3 Coefficient of Determination

According to Hair et al. (2016) and Chin (1998), R-square values of 0.25, 0.50 and 0.75 show small, moderate and large values, respectively. However, Falk and Miller (1992) recommends 10% as the minimum acceptable level of R^2 value that can be accepted. Table 4 shows the R^2 value for the study's model.

Table III: Coefficient of determination: R-squire

Construct	R-Squared
Venture creation	0.89

The R square value for the model is 0.89, which indicates that entrepreneurship education has explained about 89% of the variation in venture creation among students and graduates in Nigeria. This shows that the three dimensions of entrepreneurship education have collectively predicted venture creation. It also means that other factors that are not investigated in this study explain the remaining 11%.

4.4 Effect size (f^2) and Variance Inflation Factor

The effect size notated by f^2 value provides an overview of the effect of predecessor constructs on the outcome latent variable. The values for small, medium and large effects are 0.02, 0.15, and 0.35 respectively (Selya et al., 2012). The VIF indicates the absence or presence of multicollinearity.

Table IV: Effect size (f^2), VIF and Predictive relevance (Q^2)

Constructs	f^2	
	Venture Creation	Effect Size
Course content	0.00	Small
Delivery method	0.006	Small
Facilitators competence	0.005	Small
Self-efficacy	6.512	Large
VIF		
Course content	1.805	
Delivery method	1.762	
Facilitators comp.	1.59	
Self-efficacy	1.178	

From table 4, self-efficacy has a large effect, while course content, delivery method, and facilitators' competence have small effects on venture creation. The VIF values for all the constructs were less than 5 and as such no multicollinearity problem exists.

4.5 Implications

The study examines the moderating effect of SE on the relationship between EE and VC. The findings of the study have some implications. It implies that the ability of entrepreneurship lecturers to design curriculum-based entrepreneurial activities, like writing a business plan coupled with

excellent project management and coordination skills could help in energizing students and graduates to venture creation. It also suggests that, for lecturers of entrepreneurship education to motivate students to create new ventures, they must be able to leverage educational resources from inside and outside the University for Improved Entrepreneurial learning. The findings also suggest that lecturers should use multiple methods of assessment to evaluate students' learning and performance, and adjust, when necessary, based on the outcome of the evaluation. Therefore, the findings imply that entrepreneurship education programs should focus on enhancing individuals' self-efficacy beliefs, which can help individuals translate the knowledge and skills acquired through the program into successful venture creation.

In addition, the ability of entrepreneurship education lecturers to use case studies, venture simulation and online platforms during lectures significantly influences venture creation by students and graduates that have participated in the program. The study find that many students who were not opportune to be taught entrepreneurship by lecturers who use the above instruments were not motivated to create their ventures. In the same vein, students who are grouped

and assigned group projects by their EEP lecturers, embarked on company visits and listened to success stories from successful entrepreneurs were able to create their ventures.

However, self-efficacy did not have a moderating effect on the relationship between course content, facilitators' competence and venture creation among students of entrepreneurship education programs in Nigeria. This suggests that students' distinctive abilities and confidence to think, create, identify and commercialize new product ideas significantly contribute to venture creation by students and graduates who participated in the program. It also shows that such distinctive abilities and confidence can boost the relationship between the lecture delivery method and venture creation.

Therefore, policymakers and educators should design entrepreneurship education programs that include experiential learning activities, role modeling, and mentoring to enhance individuals' self-efficacy beliefs. Policymakers and educators should provide support for aspiring entrepreneurs to develop their self-efficacy beliefs. This can include providing access to role models and mentors, creating networking opportunities,

and providing financial support to help aspiring entrepreneurs start their ventures. Furthermore, collaboration and networking among entrepreneurs can help to enhance their self-efficacy beliefs, as they can learn from each other's experiences and gain support from peers. Therefore, policymakers and educators should encourage collaboration and networking among entrepreneurs through the creation of entrepreneurship communities, business incubators, and accelerators. Finally, a supportive entrepreneurial ecosystem can help to enhance individuals' self-efficacy beliefs and increase the chances of successful venture creation. Policymakers and educators should work together to create a supportive entrepreneurial ecosystem that includes access to funding, mentorship, business development services, and networking opportunities.

5. Conclusion

Self-efficacy is a vital factor to consider in the relationship between EE and VC in Nigeria. The findings indicate that individuals with higher levels of self-efficacy are more likely to translate the knowledge and skills gained from entrepreneurship education into successful venture creation. Therefore, it is crucial for

policymakers and educators to recognize the importance of SE and design EE programs that enhance individuals' self-efficacy beliefs. By doing so, Nigeria can create a more conducive environment for entrepreneurship and foster the growth of successful ventures that can meaningfully contribute to economic development.

Similarly, this study concludes that SE has strengthened the relationship between perceived delivery methods and venture creation among university students in Nigeria. Thus, self-efficacious students have appeared to be more disposed to creating new ventures when the facilitators' lecture delivery method was considered good. The study also concludes that facilitator's profile or competence, delivery method and self-efficacy are essential determinants of venture creation for university students and graduates. Therefore, the study provides theoretical and empirical support to the earlier assumption that SE could strengthen the relationship between EE and VC.

The findings of the study could help stakeholders in the education sector in Nigeria, especially the policy makers, in developing additional policies on teaching entrepreneurship courses among university students. The focus of those policies could

be shifted to giving special additional training to EEP lecturers across public universities to improve their entrepreneurship knowledge and skills as well as effective lecture delivery methods, which should involve the use of case studies, company visits and other technology-driven methods.

5.1 Limitations and directions for future research

We faced some limitations while conducting the research. At first, we had serious difficulties tracing students through snowballing because of the strike action of public university lecturers across Nigeria. This reduces the number of sample size that was originally envisaged to be used for the study.

Despite the challenge, the research manages to collect as much data as possible that could warrant analysis. Secondly, considering the limited time at our disposal, cross-sectional data were collected at a time that is still considered appropriate and acceptable. Future researchers can try using a longitudinal approach to assess the effects over a certain period.

REFERENCES

- Abdullahi, A. O., Egwakhe, A. J., Akande, F. I., and Umukoro, E. J. (2022). Entrepreneurship Education and Venture Creation: Experiential Learning role, *International Journal of Interdisciplinary Research and Innovations*, 10(2), 41-50
- Agwu, M. E., Onwuegbuzie, H. N., and Ezeifeke, P. (2017). Impact of entrepreneurship education on new ventures creation-a case study. *Advances in Social Sciences Research Journal*, 4(25).
- Ahmed, T., Chandran, V. G. R., and Klobas, J. (2017). Specialized entrepreneurship education: does it really matter? Fresh evidence from Pakistan. *International Journal of Entrepreneurial Behavior & Research*.
- Akarue, O. B., and Adogbeji, V. (2014). Entrepreneurship education as a strategy for enhancing human capital development in Nigeria. *Journal of Vocational and Technical Education*, 1(1), 11.
- Al-Jubari, I., Hassan, A., and Liñán, F. (2019). Entrepreneurial intention among University students in Malaysia: integrating self-determination theory and the theory of planned behavior. *International Entrepreneurship and Management Journal*, 15(4), 1323–1342.
- Al-Jubari, I., Mosbah, A., Talib, Z., Khalid, M. A., and Azman, N. (2019). How do entrepreneurship education and self-efficacy influence entrepreneurship intention. *International Journal of Innovation, Creativity and Change*, 5(2), 949–966.
- Alberti, F., Sciascia, S., and Poli, A. (2004). Entrepreneurship education: notes on an ongoing debate. *Proceedings of the 14th Annual IntEnt Conference, University of Napoli Federico II, Italy*, 4(7).
- Appiah-Nimo, C., Ofori, D. & Naa Abeka, K. A. (2018). Assessment of Entrepreneurship Education on Entrepreneurial Intentions: Evidence from University of Cape Coast. *Global Journal of Management and Business Research: A Administration and Management*. 18 (9).
- Asaju, K., Arome, S., and Mukaila, I. (2014). Leadership crisis in Nigeria: The urgent need for moral education and value re-orientation. *Public Administration Research*, 3(1), 117.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37(2), 122.
- Bandura, A. (1986). Social foundations of thought and action. *Englewood Cliffs, NJ*, 1986(23–28).
- Bandura, A. (1995). Exercise of personal and collective efficacy in changing societies. *Self-Efficacy in Changing Societies*, 15, 334.
- Bandura, A., and Walters, R. H. (1977). *Social learning theory* (Vol. 1). Englewood cliffs Prentice Hall.
- Baron, R. A., & Ensley, M. D. (2006). Opportunity recognition as the detection of meaningful patterns: Evidence from comparisons of novice and experienced entrepreneurs. *Management Science*, 52(9), 1331–1344.
- Bartlett, J. E., Kotrlik, J. W. & Higgins, C. C. 2001. Organizational research: determining appropriate sample size in survey research. *Learning and Performance Journal*, 19, 43-50.

- Belluigi, D., Czerniewicz, L., Khoo, S., Algers, A., Buckley, L. A., Prinsloo, P., Mgwashu, E., Camps, C., Brink, C., and Marx, R. (2020). "Needs must"? Critical reflections on the implications of the Covid19 "pivot online" for equity in higher education. *Digital Culture and Education*.
- Blackford, B., Sebora, T., and Whitehill, T. (2009). The effects of collegiate entrepreneurship education on post-graduation startup of new ventures: A first look. *International Review of Entrepreneurship*, 7(3), 1–26.
- Bosma, N. (2013). The Global Entrepreneurship Monitor (GEM) and its impact on entrepreneurship research. *Foundations and Trends® in Entrepreneurship*, 9(2), 143–248.
- Brice Jr, J., and Spencer, B. (2007). Entrepreneurial profiling: A decision policy analysis of the influence of entrepreneurial self-efficacy on entrepreneurial intent. *Academy of Entrepreneurship Journal*, 13(2), 47–67.
- Chen, C. C., Greene, P. G., and Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing*, 13(4), 295–316.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern Methods for Business Research*, 295(2), 295–336.
- Claudia, G., and Murniati, M. P. (2018). SELF EFFICACY AS THE MODERATING VARIABLE IN FRAMING EFFECT ON INVESTMENT DECISION MAKING. *South East Asia Journal of Contemporary Business, Economics and Law*, 16(1), 22–27.
- Colardyn, D., and Bjornavold, J. (2004). Validation of formal, non-formal and informal learning: Policy and practices in EU member states. *European Journal of Education*, 39(1), 69–89.
- Dickson, P. H., Solomon, G. T., and Weaver, K. M. (2008). Entrepreneurial selection and success: does education matter? *Journal of Small Business and Enterprise Development*.
- Emeh, I. E. J. (2012). Tackling youth unemployment in Nigeria; the Lagos State development and empowerment Programmes Initiatives. *Afro Asian Journal of Social Sciences*, 3(3.4), 1–30.
- Eunice Abdul, O. (2018). *Entrepreneurial skills and growth of Small and Medium Enterprise (SMEs): A comparative analysis of Nigerian entrepreneurs and Minority entrepreneurs in the UK*.
- Falk, R. F., and Miller, N. B. (1992). *A primer for soft modeling*. University of Akron Press.
- Fayolle, A., and Gailly, B. (2015). The impact of entrepreneurship education on entrepreneurial attitudes and intention: Hysteresis and persistence. *Journal of Small Business Management*, 53(1), 75–93.
- Fayolle, A., Gailly, B., and Lassas-Clerc, N. (2006). Assessing the impact of entrepreneurship education programmes: a new methodology. *Journal of European Industrial Training*.
- Fernando, M. S. J., and Nishantha, B. (2019). Impact of social learning on entrepreneurial behavior: Case of entrepreneurship education at state sector universities in Sri Lanka. *Entrepreneurship Education*, 2(3), 171–188.
- Finardi, U. (2013). Clustering research, education, and entrepreneurship: nanotech innovation at minatec in

- grenoble. *Research-Technology Management*, 56(1), 16–20.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Forbes, D. P. (2005). Are some entrepreneurs more overconfident than others? *Journal of Business Venturing*, 20(5), 623–640.
- Fuller, B., Liu, Y., Bajaba, S., Marler, L. E., and Pratt, J. (2018). Examining how the personality, self-efficacy, and anticipatory cognitions of potential entrepreneurs shape their entrepreneurial intentions. *Personality and Individual Differences*, 125, 120–125.
- Gatewood, E. J., Shaver, K. G., and Gartner, W. B. (1995). A longitudinal study of cognitive factors influencing start-up behaviors and success at venture creation. *Journal of Business Venturing*, 10(5), 371–391.
- Gautam, M. K., Singh, D., and Kumar, S. (2015). *Entrepreneurship education: concept, characteristics and implications for teacher education*.
- Gist, M. E. (1987). Self-efficacy: Implications for organizational behavior and human resource management. *Academy of Management Review*, 12(3), 472–485.
- Gold, A. H., Malhotra, A., and Segars, A. H. (2001). Knowledge management: An organizational capabilities perspective. *Journal of Management Information Systems*, 18(1), 185–214.
- Gorman, G., Hanlon, D., and King, W. (1997). Some research perspectives on entrepreneurship education, enterprise education and education for small business management: a ten-year literature review. *International Small Business Journal*, 15(3), 56–77.
- Guerrero, M., Lavín, J., and Álvarez, M. (2009). The role of education on start-up intentions: A structural equation model of Mexican university students. *35th Annual Conference Proceedings of the Association for Small Business and Entrepreneurship*.
- Hair, J.F., Hult, G.T.M., Ringle, C.M. and Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd Editio). Sage Publications Inc.
- Hair, J.F.Jr., Hult, G.T.M., Ringle, C., and Sarstedt, M. (2016). *A Primer on Partial Least Squares Structural Equation Modelling (PLS-SEM)*. Sage Publications.
- Herron, L., and Sapienza, H. J. (1992). The entrepreneur and the initiation of new venture launch activities. *Entrepreneurship Theory and Practice*, 17(1), 49–55.
- Hmieleski, K. M., Carr, J. C., and Baron, R. A. (2015). Integrating discovery and creation perspectives of entrepreneurial action: The relative roles of founding CEO human capital, social capital, and psychological capital in contexts of risk versus uncertainty. *Strategic Entrepreneurship Journal*, 9(4), 289–312.
- Huang, Y., An, L., Liu, L., Zhuo, Z., and Wang, P. (2020). Exploring factors link to teachers' competencies in entrepreneurship education. *Frontiers in Psychology*, 11, 563381.
- Jabeen, F., Faisal, M. N., and Katsioloudes, M. I. (2017). Entrepreneurial mindset and the role of universities as strategic drivers of entrepreneurship: Evidence from the United Arab Emirates. *Journal of*

- Small Business and Enterprise Development*.
- Jhang, F. H. (2020). Teachers' attitudes towards lesson study, perceived competence, and involvement in lesson study: Evidence from junior high school teachers. *Professional Development in Education*, 46(1), 82–96.
- Jones, C., Matlay, H., and Maritz, A. (2012). Enterprise education: for all, or just some? *Education+ Training*.
- Jones, R., Latham, J., and Betta, M. (2008). Narrative construction of the social entrepreneurial identity. *International Journal of Entrepreneurial Behavior & Research*.
- Kickul, J., and D'Intino, R. S. (2005). Measure for measure: modeling entrepreneurial self-efficacy onto instrumental tasks within the new venture creation process. *New England Journal of Entrepreneurship*.
- Kirby, D. A. (2004). Entrepreneurship education: can business schools meet the challenge? *Education+ Training*.
- Kline, R. B. (2011). Principles and practice of structural equation modeling (3. Baskı). New York, NY: Guilford.
- Kuratko, D. F. (2005). The emergence of entrepreneurship education: Development, trends, and challenges. *Entrepreneurship Theory and Practice*, 29(5), 577–597.
- Laviolette, E. M., and Radu, M. (2008). Symbolic Role Models and Entrepreneurial Intention, International Council for Small Business. *World Conference, June*, 22–25.
- Muofhe, N. J., and Du Toit, W. F. (2011). Entrepreneurial education's and entrepreneurial role models' influence on career choice. *SA Journal of Human Resource Management*, 9(1), 1–15.
- Mwasalwiba, E. S. (2010). Entrepreneurship education: a review of its objectives, teaching methods, and impact indicators. *Education+ Training*.
- Nabi, G., Liñán, F., Fayolle, A., Krueger, N., and Walmsley, A. (2017). The impact of entrepreneurship education in higher education: A systematic review and research agenda. *Academy of Management Learning & Education*, 16(2), 277–299.
- Nabi, G., Walmsley, A., Liñán, F., Akhtar, I., and Neame, C. (2018). Does entrepreneurship education in the first year of higher education develop entrepreneurial intentions? The role of learning and inspiration. *Studies in Higher Education*, 43(3), 452–467.
- Naktiyok, A., Nur Karabey, C., and Caglar Gulluce, A. (2010). Entrepreneurial self-efficacy and entrepreneurial intention: the Turkish case. *International Entrepreneurship and Management Journal*, 6(4), 419–435.
- Niemiec, T., and Lachowicz-Tabaczek, K. (2015). The moderating role of specific self-efficacy in the impact of positive mood on cognitive performance. *Motivation and Emotion*, 39(4), 498–505.
- NIRAS, N. H., and Thorgård, T. (2008). Slutevaluering AKF. Danmarks Evalueringsinstitut, NIRAS Konsulenterne Og UdviklingsForum Ministeriet for Familie-Og Forbrugeranliggender.
- Nzewi, H. N., Onwuka, E. M., and Onyesom, M. (2017). Entrepreneurship evolution and the growth of small scale businesses in Nigeria. *Journal of Business and Economic Development*, 2(3), 176–181.

- Okoye, A. C. (2017). Entrepreneurship education: A panacea for graduate unemployment in Nigeria. *Online Journal of Arts, Management & Social Sciences*, 2(1), 56–63.
- Olokundun, M., Ogbari, M., Obi, J., and Ufua, D. E. (2019). Business incubation and student idea validation: A focus on Nigerian universities. *Journal of Entrepreneurship Education*, 22(1), 1–6.
- Onuma, N. (2016). Entrepreneurship education in Nigerian tertiary institutions: A remedy to graduates unemployment. *British Journal of Education*, 4(5), 16–28.
- Othman, N., and Nasrudin, N. (2016). Entrepreneurship education programs in Malaysian polytechnics. *Education+ Training*.
- Rasmussen, E. (2005). The process of new venture creation in a university setting. *Accompanying Measures & Survival of New Firms: Between Darwinism and Assistance*.
- Sarason, Y., Dean, T., and Dillard, J. F. (2006). Entrepreneurship as the nexus of individual and opportunity: A structuration view. *Journal of Business Venturing*, 21(3), 286–305.
- Sari, T. (2016). The Mediating and Moderating Role of Self-efficacy in the Relationship between Hope and Peace Attitudes. *International Online Journal of Educational Sciences*.
- Schmoker, M. (2006). *Results now: How we can achieve unprecedented improvements in teaching and learning*. ASCD.
- Shane, S., and Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217–226.
- Souitaris, V., Zerbini, S., and Al-Laham, A. (2007). Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources. *Journal of Business Venturing*, 22(4), 566–591.
- Strimel, G., Reed, P., Dooley, G., Bolling, J., Phillips, M., and Cantu, D. V. (2014). Integrating and monitoring informal learning in education and training. *Techniques: Connecting Education & Careers*, 89(3), 48–54.
- Townsend, D. M., Busenitz, L. W., and Arthurs, J. D. (2010). To start or not to start: Outcome and ability expectations in the decision to start a new venture. *Journal of Business Venturing*, 25(2), 192–202.
- Udoye, R. N., and Mba, P. T. (2018). Strategies to promote entrepreneurship education among tertiary education students in delta state. *Nigerian Journal of Business Education (NIGJBED)*, 4(2), 124–130.
- Wahidmurni, W., Nur, M. A., Abdussakir, A., Mulyadi, M., and Baharuddin, B. (2019). Curriculum development design of entrepreneurship education: a case study on Indonesian higher education producing most startup funder. *Journal of Entrepreneurship Education*, 22(3), 1528–2651.
- Westhead, P., and Solesvik, M. Z. (2016). Entrepreneurship education and entrepreneurial intention: Do female students benefit? *International Small Business Journal*, 34(8), 979–1003.
- Wood, R., and Bandura, A. (1989). Impact of conceptions of ability on self-regulatory mechanisms and complex decision making. *Journal of Personality and Social Psychology*, 56(3), 407.
- Zainuddin, M. N. (2012). University's

entrepreneurship education: creating meaningful impression for new generation. *Edited by Thierry Burger-Helmchen*, 175.

- Zhao, H., Seibert, S. E., and Hills, G. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, 90(6), 1265.