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Mediating Effects of Entrepreneurship Education on Personality Dimensions and Venture Creation of Nigerian Graduates: An Empirical Approach

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ABSTRACT

The study examines the mediating effects of entrepreneurial education on the need for achievement, risk-taking, self-efficacy, and venture creation among Nigerian graduates. A targeted sampling technique was used for the selection of the corps members deployed to the Oyo State. Structural equation modelling was used to analyze the data with the aid of STATA version 15. The results reveal that entrepreneurship education has a positive association with the need for achievement, and self-efficacy. Further reveals that entrepreneurship education has a positive relationship with risk-taking but insignificant. It was also revealed that need for achievement has inverse relationship with venture creation, while self-efficacy has a positive but insignificant relationship with venture creation. There is evidence that taking risks is positively and significantly related to starting a business. This suggests that entrepreneurship education serves as a platform to encourage personality traits like the desire for success, risk-taking, self-efficacy, and entrepreneurial intentions to venture into business. The study, therefore, recommends that policymakers should make entrepreneurship education mandatory for students at all levels, that teachers should involve students in practical work, and that the government should create an environment that is conducive to the growth of entrepreneurship in the nation. This will significantly contribute to the 2030 Sustainable Development Goals.

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INTRODUCTION

With a GDP of over $505 billion and a purchasing power parity of about $1.3 billion, Nigeria is considered an African giant in terms of human, mineral, and natural resources, the second largest on the African continent. The country was recently ranked as the 26th largest economy on the

continent and ranked third in the total private wealth of around $228 billion. Paradoxically, with over 133 million Nigerians living below the poverty line, the country has been tagged the world's poverty headquarters. The recent devastation caused by COVID-19 has exacerbated the situation, with the unemployment rate surpassing 33.5% in the second quarter of 2022 (NBS, 2023). This awkward scenario has led Nigerian youth to rely on ritual killing, kidnapping, and Yahoo-plus syndrome to make ends meet. The country has become a lion's den for citizens and foreigners alike. This suggests that Nigerian graduates should be encouraged to become entrepreneurs rather than seeking clerical jobs that are no longer available in the country. Existing research suggests that entrepreneurship education is the antidote to poverty, unemployment, and social devices (). The study also confirms that entrepreneurship education is an alternative paradigm for job creation, wealth creation, and poverty reduction (Sajuyigbe et al., 2021). This connotes that Sustainable economic development is an indicator of entrepreneurial education through the development of young graduates.

Previous studies have linked personality dimensions (need for achievement, risk taking and self-efficacy) to venture creation. According to Agbai (2018), need for achievement (NFA), risk taking (RT) and self-efficacy (SE) are entrepreneurial tools that influence venture creation. The NFA, RT and SE drive the entrepreneurial spirit of venture creators (Sajuyigbe et al., 2021), the choice to be self-employed (Olokundun, 2017), the choice to be a successful entrepreneur (Ndofirepi, 2020), and the employer of workers (Anwar et al., 2021). Indarti and Krinstiansen (2018) view the NFA as the motivating behavior for setting achievable goals. Sajuyigbe et al. (2021) also see the NFA at an individual level that sets standards for achieving superior results. According to Sunaryo and Tukiran (2021), RT is the willingness and propensity of entrepreneurs to take risks and is a predictor of career choice, while Demir (2020) describes SE as the ability of an entrepreneur to have the confidence and entrepreneurial skills to start a business.

Numerous studies have established links between the personality dimensions (NFA, RT and SE), and entrepreneurial intention (Sajuyigbe et al., 2021; Demir, 2020; Sunaryo & Tukiran, 2021; Al-Mamary et al., 2020; Anra et al., 2020; Voda & Florea, 2019; Mor et al., 2020; Agbai, 2018; Olokundun, 2017; Indarti & Krinstiansen, 2018;). However, no studies have identified the extent to which the personality dimensions (NFA, RT and SE) influence venture creation when entrepreneurship education is introduced. This current study, therefore, builds on the existing literature on entrepreneurship by developing a model that explains the mediating effects of entrepreneurial education on the NFA, RT, SE and venture creation among Nigerian graduates.

Theoretical Framework

The theory underlying this research is that of planned behaviour. This theory was developed and validated by Ajzen (1985) and is well-documented in the literature as an important predictor of entrepreneurial behavior among business-challenging young people (Olokundun, 2017). According to Dimova and Pela (2018), this theory drives various entrepreneurial behaviors and intentions to start business ventures such as starting new companies. Existing research has linked planning-behavior theory to personality factors (NFA, RT and SE), entrepreneurship education, and entrepreneurial intentions (kautonen, Geldren & Tornikoski, 2013; Jepchirchir, Korir & Lagat, 2019; Aligba & Fusch, 2017). A study by Torniskoski and Maalaoui (2019) confirms that entrepreneurship education reshapes student behavior and shifts

towards entrepreneurial intent to start a business. Personality factors (NFA, RT and SE), on the other hand, are strong predictors of an entrepreneur's willingness to start a venture.

Theory therefore suggests that entrepreneurial education and personality factors are the driving forces that drive entrepreneurial intentions to initiate entrepreneurial ventures among young people. Jepchirchir et al. (2019) validate the theoretical claim that the entrepreneurial spirit of business-challenging students is an indicator of entrepreneurial education and personality factors. This finding confirmed that the theory of planned behavior can explain the mediating effects of entrepreneurial education on the NFA, RT, SE, and entrepreneurial intentions to start a business. Therefore, the planned behaviour theory is relevant to this study, and it is predicted to provide a strong entrepreneurial behavioral intentions among Nigerian graduates to venture into business.

Personality Dimensions and Hypotheses Development

Need for Achievement

The NFA as the motivating behavior for setting achievable goals (Indarti & Krinstiansen, 2018). According to Sajuyigbe et al. (2021), the NFA is an individual trait that focus on achievement of superior results. The NFA that drives a desire and ambition to be successful has a strong influence on venture creation (Olokundun, 2017). Samydevan et al., (2015) also aver that the NFA is a framework of entrepreneurial ambition and venture creation. According to Hsu et al. (2019), the NFA has a positive and direct link with entrepreneurial intention toward venture creation. A study by Anwar et al. (2021) establishes the link between the NFA and entrepreneurial intentions to start a business. Similarly, Sajuyigbe et al. (2021) argue that people with a high need for achievement are more likely to have the entrepreneurial spirit to start a business. Along the same lines, Munir et al. (2019) argue that there is a positive relationship between the NFA and entrepreneurial intention toward venture creation. Ismail et al. (2012) also attest that an entrepreneur's intention to start a business indicates a NFA. Popescu et al., (2016) also assert that the NFA is a powerful motivating factor that influences entrepreneurial intentions. Yukongdi and Lopa (2017) reaffirm that NFA is positively associated with entrepreneurs' intention to start a business. Thus, the following hypothesis emerged:

H_1**:** The NFA is significantly associated with venture creation

Risk-taking (RT)

The RT is considered a conscious or unconscious act of benefit or cost to one's own or the psychosocial well-being of others (Ismail et al., 2012). According to Sunaryo and Tukiran (2021), RT indicates a willingness to think about entrepreneurship and start a business. Previous research has identified a relationship between RT and entrepreneurial intention to venture into business. Al Mamari et al. (2020) found that RT is a strong predictor of entrepreneurial intentions to go into business. Mor, Madan & Chhikara (2020) also confirm that RT has a positive and significant impact on an entrepreneur's willingness to do business. Along the same lines, Caliendo et al. (2014) argue that RT is an important trait for entrepreneurs to enter and succeed in business. Ndofirepi (2020) shows that RT is positively correlated with the desire to start your own business. Similarly, Espiritu-Olmos & Sastre-Castillo (2015) argue that RT is a key factor influencing entrepreneurs' willingness to go into business. Olokundun (2017) also acknowledges that RT is an alternative paradigm to entrepreneurial intentions to venture into business. A study by Aligba and Fusch (2017) found that the ability to take risks is a prerequisite for an

entrepreneur's intention to enter a business. A study conducted in Nigeria by Agbai (2018) found that RT is the intent of forward-thinking entrepreneurs going into business. Thus, the following hypothesis is formulated:

H_2: There is a significant association between RT and venture creation

Self-Efficacy (SE)

The SE is a belief in an individual's ability and confidence to take on business challenges and succeed (Auna, 2019). Fazlurrahman (2020) sees SE as a strength for entrepreneurs to start and succeed in business. Existing research has linked SE and business formation. For example, Karabulut (2016) found that one of the important personality aspects, SE, was positively correlated with business creation. A study by Karimi et al., (2017) also confirms that SE is strongly associated with an entrepreneur's intention to enter a business. Auna (2019) also agrees with previous research that venture creation is an indicator of SE. In the same vein, Mold (2013) links SE to entrepreneurial will and behavior. Owoseni (2014) also affirms that venture creation is an indicator of SE. A study conducted by Javan (2014) found a strong relationship between SE and entrepreneurial intentions to venture into business according to the study's findings. Mould (2013) also discovered that SE is significantly associated with entrepreneurial intentions to venture into business. Similarly, Munir et al., (2019) attest the strong and positive linearity between SE and entrepreneurial intentions to venture into business. Another study conducted by Ismail et al., (2012) found that SE is one of personality dimensions that has substantial influence on entrepreneurial intentions to venture into business. The finding of Naktiyok et al., (2010) concurs with previous studies that SE is positively influence entrepreneurial intentions to venture into business. Based on the empirical findings, the following hypothesis is proposed:

H_3: SE is significantly associated with venture creation

Entrepreneurship Education (EE) as a Mediator

EE is recognized by researchers and policy makers as an alternative to positive and innovative responses to the environment in terms of entrepreneurship, skills, attitudes and ability to pursue business creation (Ojeifo, 2013; Garba, 2010). EE can be defined as the acquisition of entrepreneurial skills, attitudes and behaviors for business creation (Olubiyi et al., 2019). Existing study has attested that EE is a driver of entrepreneurial attitudes, skills, behavior and venture creation (Sunaryo & Tukiran, 2021; Mor et al., 2020; Ndofirepi, 2020). According to Mor et al. (2020), EE is an entrepreneurship tool that helps an entrepreneur to acquire an array of entrepreneurial skills to create business ventures by encouraging entrepreneurs to set achievable goals, gain confidence, accept business challenges, and inspire actions to Succeed. Omolayo (2006) argues that EE is the act of starting a business, obtaining a business idea, building trust and taking risks in order to maximize profits and maintain a competitive edge. Oguntimehin and Olaniran (2017) propose that EE is a platform for entrepreneurs to acquire a set of entrepreneurial skills, behaviors and attitudes to start a business. Qiao (2017) also argues that EE exposes entrepreneurs to risk-taking, capacity-building, self-confidence, and business creation.

A study by Mahendra et al. (2017) show that EE is directly related to aspects of personality (NFA, RT and SE) and venture creation. Similarly, Olokundun (2017) confirms that EE is highly associated with the personality dimensions, and business creation. Similarly, Israr and Mazhar

(2018) argue that EE is directly related to the NFA, RT and SE. In a similar study, Valerij and Laura (2014) confirm that EE is a roadmap for entrepreneurial motivation. Hence, the following hypotheses emerged:

H_4: EE is significantly related with need for achievement

H_5: EE is significantly related with risk-taking

H_6: EE is significantly related with self-efficacy

H_7: EE is significantly related with venture creation

H_8: EE mediates between the need for achievement and venture creation

H_9: EE mediates between risk-taking and venture creation

H_{10}: EE mediates between self-efficacy and venture creation

Conceptual Model

The following conceptual model is proposed to illustrate the mediating effect of entrepreneurship education on the NFA, RT, SE and venture creation (see figure 1).

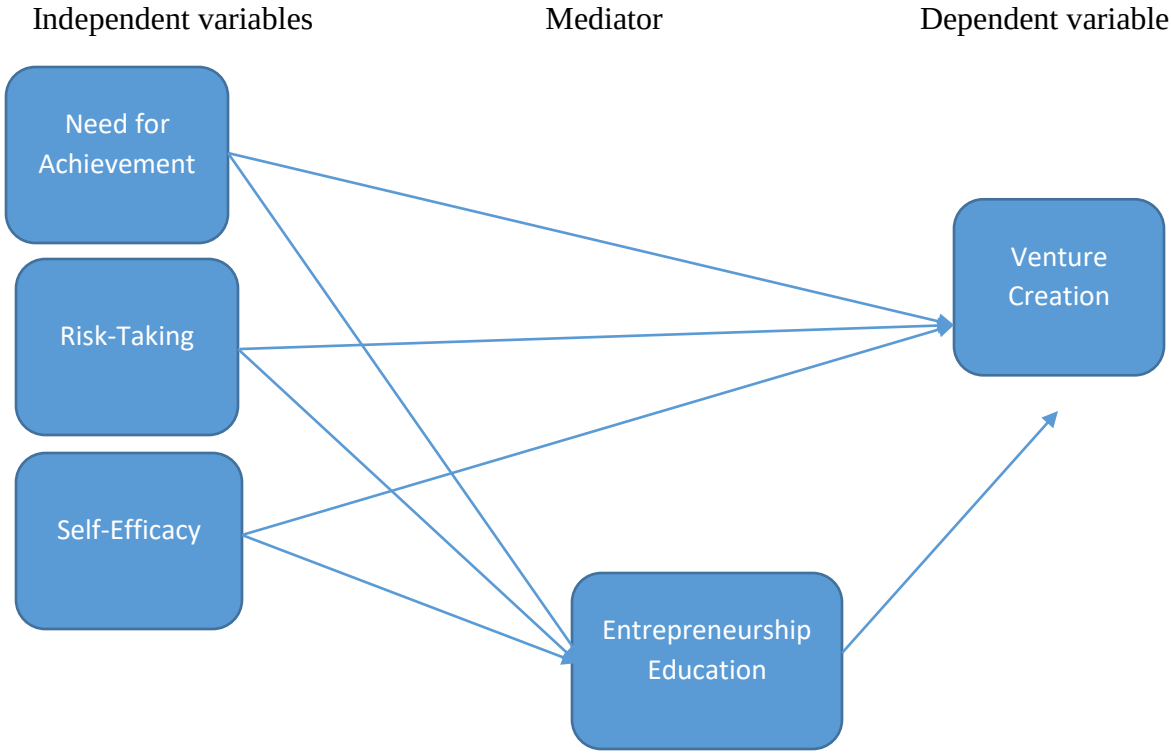

Figure 1: Conceptual Model

METHODOLOGY

A targeted sampling technique was used for Oyo State selection. Oyo State's choice is based on the fact that it is one of the largest states in Southwest and it assumed to have highest number of

corps members deployed to the state. 700 Copies of a structured questionnaire were sent to corps members in all 33 local governments of Oyo State. A total of 650 questionnaires were completed and returned to researchers. Distribution of the survey took place from December 18, 2022 to February 1, 2023. Among them, males account for 61%, while females represent 39%; the mean age of the sample was 25 years old. Bachelor degree holders accounted for 42%, while Higher National Diploma holders accounted for 58%.

The scales for the study comprised of the entrepreneurship education Scale, need for achievement scale, self-efficacy scale, and venture creation scale. These scales anchored on the likert 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). The following scales are measured as follows:

Need for Achievement Scale (NAS): This scale was developed and validated by Al- Mamari et al. (2020) and has a total of 6 items used to measure the need for achievement. Sample items for the construct are "I want to take advantage of market opportunities to become financially successful, I want to use my special skills to show new business possibilities, and I want freedom in my work. The authors reported a reliability value of 0.83 for the need for achievement.

Risk-Taking Scale (RTS): This scale was developed and validated by Munir et al. (2019) and contains a total of 5 items for measuring risk-taking. Examples of items include: ` I believe in the philosophy that the higher the risk, the higher the reward, It is very dangerous not to take risks when starting a new business and how well a company can claim in the market is related to uncertainty. The authors reported a reliability value of 0.79 for the risk-taking.

Self-Efficacy scale (SES): This scale was developed and validated by Agbai (2018) and contains a total of 6 items for measuring self-efficacy. Examples of items include: I can plan activities to take advantage of new opportunities, I am confident that I can muster the effort necessary to start a business and I can position myself in the product market. The author reported a reliability value of 0.81 for the self-efficacy.

Entrepreneurship Education Scale (EES): This scale was developed and validated by Mor et al. (2020) and contains a total of 5 items for measuring entrepreneurship education. Examples of items include: Inspirational teaching methods solve problems in new ways, educator professionalism Influences my thinking about starting entrepreneurial Ventures, and my educator teaches me more about entrepreneurship. The authors reported a reliability value of 0.80 for the entrepreneurship education.

Venture Creation Scale (VCS): This scale was developed and validated by Sajuyigbe et al. (2021) and contains a total of 5 items for measuring venture creation. Examples of items include: I am planning to start a venture company and become my own boss, I have acquired various entrepreneurial skills to start my entrepreneurial business, and proud to be an entrepreneur after completing my service. The authors reported a reliability value of 0.83 for the venture creation.

Exploratory factor analysis (EFA)

EFA was used to test the validity and feasibility of maximum likelihood and promax rotation measurements used to determine the underlying factors/structures of various measured variables.

Table 1: Exploratory Factor Analysis for Testing Validity of the Constructs

Need for Achievement	1	2	3	4	5
NASQ1	.839				
NASQ2	.820				
NASQ3	.891				
NASQ4	.801				
NASQ5	.818				
NASQ6	.811				
Risk-Taking					
RTSQ1		.263			
RTSQ2		.821			
RTSQ3		.814			
RTSQ4		.824			
RTSQ5		.833			
Self-Efficacy					
SESQ1			.841		
SESQ2			.822		
SESQ3			.789		
SESQ4			.852		
SESQ5			.799		
SESQ6			.871		
Venture Creation					
VCSSQ1				.772	
VCSQ2				.797	
VCSQ3				.823	
VCSQ4				.819	
VCSQ5				.807	
Entrepreneurship Education					

EESQ1					.823
EESQ2					.811
EESQ3					.809
EESQ4					.817
EESQ5					.797
KMO = 0.844 Bartlett's Test of Sphericity (X^2) = 1341.090, 0.000. Total Variance Explained = 85.5%					

Table 1 depicts that the community value for each variable is more than 0.50, the KMO test is 0.844, and the Bartlett test for Sphericity has a significance level of 5%. These indicators reveal that the survey is factorable.

DATA ANALYSIS RESULTS AND DISCUSSION

Table 2: Structural Equation Modelling without Mediator (Direct Effect)

Path	beta-value	T-value	P-value	[95% Conf. Interval]		Remark
VCS <- NAS	-.018	-0.21	0.837	-.1955873	.1583281	**H_1 Not confirmed**
VCS <- RTS	.309	3.58	0.000	.1398409	.4791606	**H_2 Confirmed**
VCS <- SES	.079	1.02	0.309	-.0741064	.2337923	**H_3 Not confirmed**
EES <- NAS	.455	5.73	0.000	.2998063	.6113421	**H_4 Confirmed**
EES <-RTS	.152	1.84	0.065	-.009572	.3155447	**H_5 Not confirmed**
EES <- SES	.259	3.54	0.000	.1159154	.402802	**H_6 Confirmed**
VCS <- EES	.451	4.54	0.000	.289233	.6132744	**H_7 Confirmed**

Table 2 depicts the relationship between personality dimensions [NFA, RT and SE], EE and venture creation. The b-value of 0.455 and t-value of 5.73 reveal that NFA has a positive association with EE. The p-value of 0.000 further reveals that the relationship between NFA and EE is significant. This showcases that EE is a platform through which special skills are acquired to show new business possibilities. The result also reveals that EE is positively but insignificantly ($\beta = 0.152$; $t = 1.84$; $p>.05$) associated with RT. This may be as a result of unstable economy, cashless policy, and national debt and socio- devices. Furthermore, the beta-value of .259 and t-value of 3.54 indicate that EE is positively and significantly associated with SE with p-value of 0.000. This connotes that EE has built students' confident to and necessary effort to start a business. Evidence shows that EE is a strong predictor of venture creation with (β =.451; $t = 5.46$; $P<.05$). This connotes that EE is only antidote to unemployment, poverty, kidnapping, and Yahoo+ syndrome among Nigerian youths.

From Table 2, it was revealed that NFA has inverse relationship with venture creation (β = -.018; $T = -0.21$; $P>.05$). This implies that the economy and political saga in Nigeria have prevented entrepreneurs to showcase their entrepreneurial skills toward venture creation.

The beta-value of .309 and t-value of 3.58 show that RT is positively and significantly associated with venture creation with a p-value of 0.000. This implies that entrepreneurs have a strong belief in the philosophy that the higher the risk, the higher the reward that prompt them to venture into business. Furthermore, the result shows that SE (β =.079; t = 1.02; P > .05) has a positive but insignificant relationship with venture creation.

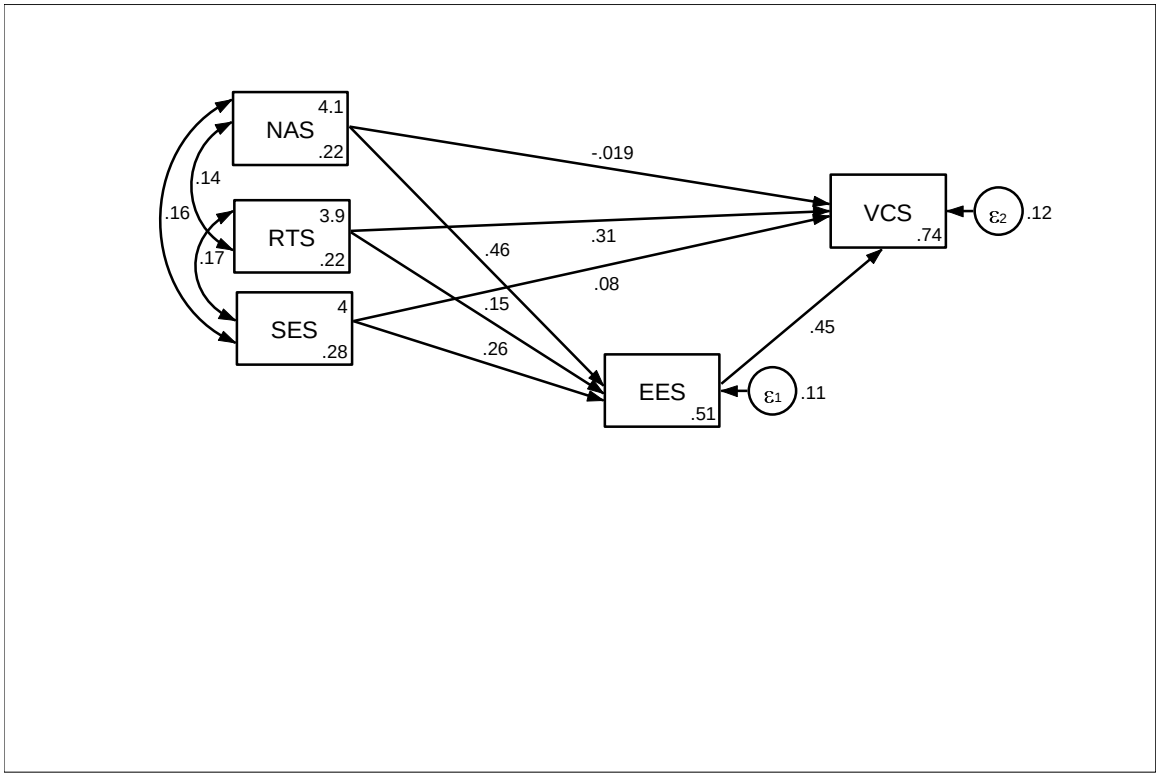

Figure 1: Structural equation modelling (SEM)

Table 3: Structural Equation Modelling with mediator (Indirect Effect)

Path	beta-value	T-value	P-value	Hypothesis	
VCS <-EES <- NAS	.205	3.95	0.000	**H_8**	Confirmed
VCS <-EES <-RTS	.069	1.75	0.081	**H_9**	Not confirmed
VCS <-EES <- SES	.117	2.97	0.003	**H_{10}**	Partially Confirmed

Table 3 shows that when EE was introduced, the unstandardized beta- changed from -0.18 to 0.205 and t-value changed from -0.21 to 3.95, p-value changed from 0.837 to 0.000 (see Table 2). This indicates that EE is strong mediator. Therefore, EE mediates between NFA and venture creation. The result also reveals that when EE was introduced, the unstandardized beta- value reduced from 0.309 to 0.069 and t-value reduced from 3.58 to 1.75, while p-value increased from 0.000 to 0.081 (see Table 2). This connotes that EE is not a mediator. Hence, EE does not mediate between RT and venture creation. Evidence shows that EE is a predictor of venture creation with beta-value of 0.117, t-value of 2.97 and p-value of 0.003, while SE is also a

predictor of venture creation with a beta-value of 0.451, t- value of 4.54 and p-value of 0.000 (see Table 2). This connotes that EE partially mediates between SE and venture creation. This result is in alignment with the guidelines proposed by Baron and Kenny (1998) that when independent variable and mediator are predictors of independent variable partial mediation occurs.

The implication of these findings is that EE is a platform that drives personality traits such NFA, RT, SE and entrepreneurial intentions toward venture creation. Also, indicates that EE is palliative strategy to scarcity of job opportunities, acute poverty, Yahoo+ syndrome, kidnapping, and ritual killing among Nigerian youths. An array of entrepreneurial skills acquired via EE open doors for the NFA, RT, SE and a lot of opportunities for venture creation.

CONCLUSION

The study examines the mediating effects of EE on the NFA, RT, SE, and venture creation among Nigerian graduates. A targeted sampling technique was used for the selection of the corps members deployed to the Oyo State. 700 Copies of a structured questionnaire were sent to the respondents, while a total of 650 questionnaires were completed and returned to researchers. Structural equation modelling was used to analyze the data with the aid of STATA version 15. The results reveal that entrepreneurship education has a positive association with the need for achievement, and self-efficacy. This showcases that EE is a platform through which special skills are acquired to show new business possibilities. Furthermore, EE has a positive relationship with RT but insignificant. This may be as a result of unpredictable economic policies in the country. It was also revealed that NFA has inverse relationship with venture creation, while SE has a positive but insignificant relationship with venture creation. Evidence also shows that RT is positively and significantly associated with venture creation. This implies that entrepreneurs have a strong belief in the philosophy that the higher the risk, the higher the reward that prompt them to venture into business.

Conclusively, EE is a platform that drives personality traits such NFA, RT, SE and entrepreneurial intentions toward venture creation.

Study Implications

This current study is the first to examine the mediating effect of EE on the relationship between personality dimensions (NFA, RT and SE) and venture creation, even though many studies have looked at personality traits as an antecedent of entrepreneurial intentions. This current study provides a fresh perspective on how EE can foster personality dimensions and venture creation among Nigerian graduates. To better understand the topic, our study was carried out in Oyo State, Nigeria to know the extent EE drives personality traits such as the NFA, RT, SE and entrepreneurial intentions toward venture creation.

Many studies have linked a positive association between personality traits and entrepreneurial intentions across the world. Still, no studies have addressed the extent to which personality dimensions affect venture creation when EE is introduced. This current study bridges the gap in entrepreneurship literature by developing a model that supports personality dimensions and venture creation as antecedents of entrepreneurship education.

In addition, this research exposes policymakers, educators, entrepreneurs, and students that acquiring a spectrum of entrepreneurial skills through entrepreneurship education empowers

individuals to identify new business possibilities, to have the confidence to succeed in a competitive environment, and to take calculated risks in order to take advantage of new opportunities. The study therefore urges policymakers to make EE mandatory for students at all levels, while educators should involve students in practical work, and the government should create an environment that is conducive to the growth of entrepreneurship in the nation. This will significantly contribute to the 2030 Sustainable Development Goals.

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REFERENCES :

Agbai E. (2018). Pathways to entrepreneurship training towards addressing youth nemployment in Nigeria. Walden University; 2018

Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckman (Eds.), Actioncontrol: From cognition to behavior (pp. 11–39). Heidelberg. Germany: Springer.

Aligba, A. O., & Fusch, G. E. (2017). Entrepreneurial motivations and characteristics of Niger Delta youths: An exploratory study. *Journal of Social Change, 9*, 87-99. doi:10.5590/JOSC.2017.09.1.08

Al Mamary, Y. H. S., Abdulrab, M., Alwaheeb, M. A., & Alshammari, N. G. M. (2020). Factors Impacting Entrepreneurial Intentions among University Students in Saudi Arabia: Testing an Integrated Model of Tpb and Eo, *Education+ Training*, 62(7/8), 2020, 779-883.

Anra, Y., Ayun, Q., & Romios, S. (2020). Analysing the Effect of Need for Achievement and Locus of Control on Student Entrepreneurial Intentions, *IRJE Indonesian Research Journal in Education*, 28-42.

Anua M.S (2019). *Locus of Control and Self-Efficacy on Entrepreneurial Intentions in the Digital Age*.5th ASEAN Conference on Psychology, Counselling, and Humanities (ACPCH 2019)

Anwar, I., Jamal, M. T., Saleem, I., & Thoudam, P. (2021). Traits and entrepreneurial intention: testing the mediating role of entrepreneurial attitude and self-efficacy. *Journal for International Business and Entrepreneurship Development*, *13*(1), 40-60.

Ahmed, N., Mahboob, F., Hamid, Z., Sheikh, A. A., Ali, M. S. E., Glabiszewski, W., ... & Cyfert, S. (2022). Nexus between Nuclear Energy Consumption and Carbon Footprint in Asia Pacific Region: Policy toward Environmental Sustainability. *Energies*, *15*(19), 6956.

Caliendo, M., Fossen, F., & Kritikos, A. S. (2014). Personality characteristics and the decisions to become and stay self-employed. *Small Business Economics, 42*(4), 787-814. doi:10.1007/s11187-013-9514-8.

Demir, S. (2020). The role of self-efficacy in job satisfaction, organizational commitment, motivation and job involvement. *Eurasian Journal of Educational Research*, 20(85), 205-224.

Dimova, R., & Pela, K. (2018). Entrepreneurship: structural transformation, skills and constraints. *Small Business Economics, 51*(1), 2018, 203-220.

Espíritu-Olmos, R., & Sastre-Castillo, M. A. (2015). Personality traits versus work values: Comparing psychological theories on entrepreneurial intention. *Journal of Business Research, 68*(7), 1595-1598. doi:10.1016/j.jbusres.2015.02.001.

Fazlurrahman, H. (2020). Measuring Entrepreneurship Intention With Need For Achievement, Locus Of Control, Self-Efficacy, and Readiness Instrument: Business and Engineering Student In Indonesia. *International Journal of Management, Innovation & Entrepreneurial Research* 6(1), 07-14. https://doi.org/10.18510/ijmier.2020.612

Firdaus, R., Xue, Y., Gang, L., & e Ali, M. S. (2022). Artificial intelligence and human psychology in online transaction fraud. *Frontiers in Psychology*, *13*.

Garba, A.S. (2010). Refocusing Education System Towards Entrepreneurship Development in Nigeria: A Tool for Poverty Eradication. *European Journal of Social Sciences*. Retired from www.eurojornals.com/ejssis-1-13.pdf.

Indarti, N., & Krinstiansen, S. (2018). Determinants of Entrepreneurial Intention: The Case of Norwegian Students. *Gadjah Mada International Journal of Business*, *5*(1), 79. https://doi.org/10.22146/gamaijb.5392

Ismail, N., Jaffar, N., Khan, S., & Leng, T. (2012). Tracking the cyber entrepreneurial intention of private universities students in Malaysia. *International Journal of Entrepreneurship and Small Business, 17*(4), 538-546.

Israr M, Saleem M. (2018). Entrepreneurial intentions among university students in Italy, Journal of Global Entrepreneurship Research, 2251-7316, Springer, Heidelberg. 2018;8(20):1-14. Available:http://dx.doi.org/10.1186/s40497-018-0107-5

Javan, R. S. J. (2014). *The Relationship between Personality Traits and Entrepreneurial Intentions*, 11(2), 46-58.

Jepchirchir, J., Korir, M., & Lagat, C. (2019). Determinants of Entrepreneurial Intention among Tvet Students in North Rift Region, Kenya. *Journal of Business Management*, 21(8), 7-16.

Karabulut, A. T. (2016). Personality Traits on Entrepreneurial Intention. *Procedia - Social and Behavioral Sciences, 229*, 12–21. https://doi.org/10.1016/j.sbspro.2016.07.109

Karimi, S.; Biemans, H.J.A.; Lans, T.; Chizari, M.; Mulder, M.; & Mahdei, K.N. (2013). Understanding role models and gender influences on entrepreneurial intentions among college students. *Procedia Soc. Behav. Sci*. 93, 204–214.

Kautonen, T., Van Gelderen, M., & Tornikoski, E. T. (2013). Predicting entrepreneurial behaviour: A test of the theory of planned behaviour. *Applied Economics, 45*(6), 697-707.

Li, H., Ali, M. S. E., Ayub, B., & Ullah, I. (2023). Analysing the impact of geopolitical risk and economic policy uncertainty on the environmental sustainability: evidence from BRICS countries. *Environmental Science and Pollution Research*, 1-15.

Mahendra AM, Djatmika ET, Hermawan A. (2017). The Effect of Entrepreneurship Education on Entrepreneurial Intention Mediated by Motivation and Attitude among Management Students, State University of Malang, Indonesia. International Education Studies. 2017;10(9):61.

Mor, S., Madan, S., & Chhikara, R. (2020). The risk-seeking propensity of Indian entrepreneurs: A study using GEM data. *Strategic Change, 29*(3), 2020, 311-319.

Mould, C. (2014). *Do Personality Traits Predict Entrepreneurial Intention and Performance?,*

University of Cape Town, 2014.

Munir, H., Jianfeng, C., & Ramzan, S. (2019). Personality traits and theory of planned behavior comparison of entrepreneurial intentions between an emerging economy and a developing country. *International Journal of Entrepreneurial Behavior & Research*, https://doi.org/10.1108/IJEBR-05-2018-0336.

Naktiyok, A., Karabey, C. N., & Gulluce, A. C. (2010). Entrepreneurial Self-Efficacy and Entrepreneurial Intention: The Turkish Case, *International Entrepreneurship Management Journal*, 6(4), 419-35.

Ndofirepi T.M. (2020). Relationship between entrepreneurship education and entrepreneurial goal intentions: Psychological traits as mediators. *Journal of Innovation and Entrepreneurship*. 9(2):1-20.

Oguntimehin, Y. A., & Olaniran, O. O. (2017). The relationship between entrepreneurship education and students' entrepreneurial intentions in Ogun state-owned universities, Nigeria. *British Journal of Education*, 5(3), 9-20.

Ojeifo, S.A. (2013). Entrepreneurship Education in Nigeria. A Panacea for Youth Unemployment. *Journal of Education and Practice,* Vol. 4 (6), 61 – 67.

Olokundun A.M. (2017). *Pecerptions Of Students On Entrepreneurship Education And Entrepreneurial Intentions In Selected Nigerian Universities.* Covenant University, Ota, Nigeria; 2017.

Olubiyi, T. O, Egwakhe, A.J,Amos, B and Ajayi, A.A (2019) Entrepreneurial Orientation and Firm Profitability: Evidence from Lagos State Nigeria, Entrepreneurial Orientation and Firm Profitability: Evidence from Lagos State Nigeria, 21(6), pp. 42-54

Omolayo B. (2006). Entrepreneurship in theory and practice. In F. Omotosho, T. K. O Aluko, O. I Wale and G.Adaramola (Eds). Introduction to entrepreneurship development in Nigeria. Ado Ekiti: UNAD Press.

Owoseni, O. O. (2014). The Influence of Some Personality Factors on Entrepreneurial Intentions, *International Journal of Business Social Science*, 59(1), 2014.

Popescu, C. C., Bostan, I., Robu, I.- B., Maxim, A., & Diaconu (Maxim), L. (2016). An Analysis of the Determinants of Entrepreneurial Intentions among Students: A Romanian Case Study. *Sustainability*,*8*(8), 771.

Qiao, Y. (2017). *A research on education system of innovation and entrepreneurship in Chinese college*s. 3rd International Conference on Education and Social Development (ICESD 2017).

Sajuyigbe, A.S, Eniola, A.A, Oyedele, O, & Adeyeye, M.M. (2021). Entrepreneurship Education as mediation in entrepreneurial culture effects on career readiness of youth towards entrepreneurial ventures**.** *International Journal of Entrepreneurship*. 25 (2), 2021.

Samydevan, V., Piaralal, S., Othman, abd kadir, & Osman, Z. (2015). Impact of Psychological Traits, Entrepreneurial Education and Culture in Determining Entrepreneurial Intention among Pre-University Students in Malaysia. *American Journal of Economics*, *5*(2), 163–167.

Sunaryo, W., & Tukiran, M. (2021). The Effect of Work Pattern and Need for Achievement on Problem Solving Effectiveness, *Linguistica Antverpiensia*, 2021, 2960–2986.

Tornikoski, E., & Maalaoui, A. (2019). Critical Reflections: The Theory of Planned Behaviour: An Interview with Icek Ajzen with Implications for Entrepreneurship Research. *International Small Business Journal*, 37(5), 536-50.

Valerij, D., & Laura, R. (2014). *Moving forward – Entrepreneurship Education for Sustainable Economy*. A paper presented at international conference at Portonoz in Slovenia, 25-27 June, 2014.

Sibt-e-Ali, M., Chaudhary, I. S., & Farooq, F. (2018). Impact of Human and Social Capital on Economic Development in Pakistan: Empirical Evidence from Primary Data Analysis. Journal of Accounting and Finance in Emerging Economies, 4(1), 39-46.

Vodă, A.I., & Florea, N. (2019). Impact of Personality Traits and Entrepreneurship Education on Entrepreneurial Intentions of Business and Engineering Students, *Sustainability* 11 (4), 2019, 1192.

Weimin, Z., Sibt-e-Ali, M., Tariq, M., Dagar, V., & Khan, M. K. (2022). Globalization toward environmental sustainability and electricity consumption to environmental degradation: does EKC inverted U-shaped hypothesis exist between squared economic growth and CO2 emissions in top globalized economies. *Environmental Science and Pollution Research*, *29*(40), 59974-59984.

Yukongd, I, V., & Lopa, N. Z. (2017). Entrepreneurial intention: a study of individual, situational and gender differences. *Journal of Small Business and Enterprise Development*, *24*(2), 333–352. https://doi.org/10.1108/JSBED-10-2016-0168