

Effects of Personality Traits on Entrepreneurial Intention in Delta State, Nigeria

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Abstract

Prior studies offer conflicting findings as to whether individual personality characteristics of students influence their intention to embrace entrepreneurship as a career choice. This study evaluated how the five big personality traits associated with entrepreneurial intention using a sample of 541 final year students in six Universities in Delta State, Nigeria. Hypotheses were tested using multivariate regression at 0.05 level of significance and findings indicated that personality traits significantly predict entrepreneurial intention. More so, the relations between three personality traits (agreeableness, conscientiousness, openness) with entrepreneurial intention were significant and positive. Whereas, the association between extraversion and entrepreneurial intention was positive; the link between neuroticism and entrepreneurial intention was negative, however both relationships were insignificant. The study advocated that entrepreneurial development initiatives for Nigerian Universities should emphasize on the development of personality traits such as agreeableness, conscientiousness and openness, as these will enhance the eagerness of students to adopt entrepreneurship as a career choice.

Keywords: Agreeableness; Conscientiousness; Entrepreneurial intention; Extraversion; Neuroticism; Openness

Introduction

In recent times, unemployment level in Nigeria has increased in an astronomical rate, giving rise to social unrest. The unemployment level in the country has been partly attributed to the desire to seek for paid employment rather than embracing entrepreneurship as a career path among graduates of Universities. To reverse this trend, the Nigerian University Commission (NUC) initiated several entrepreneurial development programmes across all Universities. However, the impact of such initiatives is not yet felt despite the huge resources devoted to them (Odumosu, Binuyo, Kelani & Williams, 2019). Prior studies have shown that different factors may influence entrepreneurial intention among students such as social networking (Subrahmanyam, 2019), culture (Thurik & Dejardin, 2012); personality traits (Zhao, Seibert & Lumpkin, 2010), education (Vakili, Tahmasebi, Tahmasebi & Tahmasebi, 2016), and attitudes (Gedik, Miman & Kesici, 2015).

While several studies established that personality traits can influence entrepreneurial intention, conflicting results make them inconclusive (Udayanganie, Jusoh & Chinna, 2019; Butz, Hanson,

Schultz & Warzynski, 2018; Hu, Zicheng, Shiwen, Xiaoyu, Xinyue & Zehui, 2017). Consequently, this study aims to establish the linkage between the big five personality traits, and entrepreneurial intention among final - year students in six Universities in Delta State, Nigeria. The remaining part of this paper is sectioned as follows: literature review, research methods, results, discussion of findings, conclusion, and recommendations.

Literature Review

Entrepreneurial Intention

Entrepreneurial activities begin with developing an intention to act (Rauch & Hulsink, 2015). Krueger, Reilly and Carsrud (2000) argued that entrepreneurship is an intentionally planned form of behavior. An intention is an attitude directing attention towards an achievable objective or goal (Bird & Jelinek, 1988). Furthermore, Cholil (2015) established that entrepreneurial intention is a precursor for creating a new business enterprise. As with most concepts in management, entrepreneurial intention does not have an acceptable definition among scholars. However, Al-Qadasi, Zhang and Tesfaye (2019) described entrepreneurial intention as the willingness or plan to set-up a new business in the future. It is therefore the willingness to engage in entrepreneurial activities (Kiiru, Iravo & Kamau, 2015).

Odumosu *et al* (2019) opined that entrepreneurial intention is the readiness and plan of an individual to start a business venture sometime in the future. For someone to have an entrepreneurial intention, Salim, Muhammad and Abdussakir (2019) suggested that the following must be present: (1) willingness to work hard and diligently to achieve desired progress; (2) willingness to take responsibility for risks at work; (3) willingness to use other channels and methods of communication; (4) willingness to live in economic ways; and (5) willingness to learn something. Bambale and Shika (2016) indicated that embracing entrepreneurship is not just about developing required skills but much more based on intention. It is therefore pertinent to examine the determinants of an undergraduate's choice of entrepreneurship as a career path.

Personality Traits

The concept of personality has been studied by researchers in different fields for over five decades, yet there is no generally accepted definition of it. Personality is an individual's personal attributes that are consistent, developed over time, and differentiate a person from one another. Uher (2017) argued that in a broad sense, personality entails a person's characteristic pattern of behaviour which includes thought pattern, motivation as well as feelings. Sarafino (2006) noted that personality is a person's affective, behavioural, and cognitive tendencies that are fairly stable across time and situations. These personality traits tend to predict the behavioural patterns of individuals.

Although several dimensions of personality can be observed within the literature, most researchers adopted the five big personality traits identified by Costa and McCrae (1986); these dimensions encompassed extraversion, agreeableness, conscientiousness, neuroticism, and openness. According to Costa and McCrae (1986), these traits are in a continuum from low to high, and

individuals with a higher score on a trait have that trait in a higher amount. People that score high in extraversion tend to have positive emotions, sociable, enthusiastic, energetic, and active. Furthermore, someone who is anxious, moody, worrying, tense, or distress would score high on neuroticism (or emotional instability). A high score in agreeableness indicates that an individual is friendly, cooperative, trustworthy, flexible, or lenient. A high score in conscientiousness indicates that the individual is dependable, hardworking, competent, well-organized, ambitious, and responsible. People with openness to experience as a personality trait are curious, creative, imaginative, original, and aesthetic.

Review of Empirical Literature

Previous studies have examined how personality traits relate to entrepreneurial intention, however conflicting results indicate that further research is needed. For instance, Ahmed, Khattak, and Anwar (2020) using a sample of 274 Pakistani university students reported that extraversion, openness, neuroticism and agreeableness insignificantly influence entrepreneurial intention while conscientiousness is related positively to entrepreneurial intention. Butz, et al (2018) examined the influence of personality traits on entrepreneurial intention among university students in the United States of America and reported that openness has a positive effect on entrepreneurial intention, while extraversion and agreeableness were not significantly associated with entrepreneurial intention.

In the Chinese context, Hu *et al* (2017) found that 280 students surveyed indicated that interpersonal relationships, conscientiousness and extraversion were associated positively with entrepreneurial intention. Besides, openness and agreeableness were not linked with entrepreneurial intention. Udayanganie *et al* (2019) found that data from 202 final year undergraduates in Sri Lanka revealed that openness and emotional stability were significantly and positively related to entrepreneurial intention however extraversion, conscientiousness, and agreeableness were not associated with entrepreneurial intention. Sahin, Karadag, and Tuncer (2019) adopting a configurational approach showed that a positive association exists between the personality trait of extraversion and entrepreneurial intention.

Three meta-analytic studies of the relation between personality traits and entrepreneurial intention revealed conflicting results. Zhao and Seibert (2006) meta-analysis showed an insignificant association between extraversion and entrepreneurial intention; on the other hand, Rauch and Frese (2007) meta-analysis established a significant association between both constructs. Zhao *et al* (2010) performing a set of meta-analyses and found that openness, extraversion, conscientiousness, and emotional stability related positively with entrepreneurial intention, while agreeableness was found not to be related to entrepreneurial intention.

Given the above, this paper evaluated how five big personality traits (agreeableness, conscientiousness, openness, extraversion, and neuroticism) associate with entrepreneurial intention and therefore hypothesized as follows:

H1: Five big personality traits significantly predict entrepreneurial intention.

H2: Extraversion has a significant positive association with entrepreneurial intention.

- H3: Agreeableness has a significant positive association with entrepreneurial intention.
 H4: Conscientiousness has a significant positive association with entrepreneurial intention.
 H5: Neuroticism has a significant positive association with entrepreneurial intention.
 H6: Openness has a significant positive association with entrepreneurial intention.

Research Methods

This study adopted a survey research design since the study seeks to obtain the perception of people on personality traits and entrepreneurial intention. A structured questionnaire was employed in collecting data from a sample of 600 final - year students selected from six universities in Delta State, Nigeria. However, 541 useful questionnaires were retrieved giving a 90.2 percent response rate; Table 1 indicates the total respondents drawn from each university.

Table 1: Number of Respondents per University

Universities	Number of Respondents
Delta State University, Abraka	195
Western Delta University, Oghara	47
Novena University, Kwale	53
Federal University of Petroleum Resources, Effurun	151
Edwin Clark University, Kiagbodo	43
Michael and Cecilia Ibru University, Ughelli	52
Total	541

Source: Researcher's Compilation, 2020

The questionnaire used in this study consists of items used in previous research. Entrepreneurial intention was measured by six items adopted from Robledo, Aran, Martin-Sanchez, and Molina (2015). Personality was measured by forty-four items adopted from John and Srivastava (1999). Participants used a 5-point scale (1- strongly disagree to 5- strongly agree) to respond to items in the questionnaire. The research model built for this study was:

$$e_i = \alpha_0 + \alpha_1e + \alpha_2a + \alpha_3c + \alpha_4n + \alpha_5o + \epsilon_1 \quad (1)$$

Where, e_i =entrepreneurial intention; e = extraversion; a = agreeableness; c = conscientiousness; n = neuroticism; o = openness; ϵ_1 = Error terms; $\alpha_0 \dots \alpha_5$ = coefficients

Result of the Findings

The descriptive statistics of the research variables are presented in Tables 2 and 3, which shows that majority of the respondents were females 294 (54.34%) while 247 (45.66%) were male. Further, 131 (24.21%) were below 20 years, 227 (41.96%) were between 21 – 23 years, 108 (19.96%) were between 24 – 26 years, 68 (12.57%) were between 27 – 29 years and 7 (1.29%) were above 30 years. As shown in Table 3, the mean ranges from 2.98 (extraversion) to 3.20 (entrepreneurial intention), while the standard deviation ranges from 0.38 (extraversion) to 0.60 (entrepreneurial intention). Also, the Cronbach Alpha coefficient of all the variables was greater than the cut-off point of 0.70, ranging from 0.77 (neuroticism) to 0.85 (conscientiousness).

Table 2: Demographic description of Respondents

Gender	Frequency	Percentage	Cumulative Percentage
Male	247	45.66	45.66
Female	294	54.34	100.00
Total	541	100.00	
Age			
Below 20 years old	131	24.21	24.21
21 – 23 years old	227	41.96	66.17
24 – 26 years old	108	19.96	86.14
27 – 29 years old	68	12.57	98.71
30 years old and above	7	1.29	100.00
Total	541	100.00	

Source: Researcher’s Compilation, 2020

Table 3: Mean, Standard Deviation and Cronbach Alpha of study variables

Variable	Mean	Standard Deviation	Cronbach Alpha	Min	Max
e	2.98	0.38	0.84	1	5
a	3.16	0.48	0.79	1	5
c	3.09	0.45	0.85	1	5
n	2.99	0.40	0.77	1	5
o	3.09	0.45	0.83	1	5
ei	3.20	0.60	0.81	1	5

Source: Researcher’s Compilation, 2020

The result of pairwise correlation of the study variables are shown in Table 4. The correlation coefficients indicate that agreeableness ($r = 0.34, p < 0.05$); conscientiousness ($r = 0.31, p < 0.05$); and openness ($r = 0.30, p < 0.05$) were significantly and positively associated with entrepreneurial intention at 95% level of significance. Extraversion ($r = 0.08, p > 0.05$) was positively but insignificantly associated to entrepreneurial intention. Further, neuroticism ($r = -0.04, p > 0.05$) was negative but insignificantly associated to entrepreneurial intention. The correlation coefficients among independent variables were small (Table 4), indicating the absence of multicollinearity in the study. To further confirm this, the result of Variance Inflation Factor (VIF) is shown in Table 5. The mean VIF of the independent variables was below the cut-off of 10.

Table 4: Correlation coefficients among the study variables

Variable	gender	age	e	a	c	n	o	ei
gender	1.000							
age	0.060	1.000						
e	0.013	-0.079	1.000					
a	-0.012	-0.057	-0.062	1.000				
c	0.002	-0.023	0.104*	0.310*	1.000			
n	0.099*	-0.006	-0.064	-0.162*	-0.026	1.000		
o	0.040	-0.087*	0.051	0.359*	0.353*	0.121*	1.000	
ei	0.036	-0.164*	0.076	0.344*	0.314*	-0.041	0.295*	1.000

Source: Researcher’s Compilation, 2020; * $p < 0.05$

Table 5: Variance Inflation Factor (VIF)

Variables	VIF	1/VIF
e	1.03	0.97
a	1.28	0.78
c	1.21	0.83
n	1.08	0.93
o	1.29	0.77
Mean VIF	1.18	

Source: Researcher's Compilation, 2020

The result of multiple regression indicates that overall, the big five personality traits significantly predicted entrepreneurial intention with $F(5,535) = 24.60$; $\text{Prob} > F = 0.0000$ and $R - \text{square} = 0.187$. Thus, H1 cannot be rejected. Based on the regression estimates shown in Table 6, the research model for this study is given as

$$ei = 0.70 + 0.10e + 0.29a + 0.24c - 0.02n + 0.12o + \epsilon_1 \quad (2)$$

This indicated that agreeableness ($\beta = 0.29$, $p < 0.05$); conscientiousness ($\beta = 0.24$, $p < 0.05$); and openness ($\beta = 0.12$, $p < 0.05$) were significantly and positively associated with entrepreneurial intention. Thus, H3, H4, and H6 cannot be rejected. Further, extraversion ($\beta = 0.10$, $p > 0.05$) and neuroticism ($\beta = -0.02$, $p > 0.05$); have no significant positive association with entrepreneurial intention. Thus, H2 and H5 were rejected.

Table 6: Results of Hypotheses Testing

ei	Coefficients	Standard Error	t	p > /t/	[95% Confidence Interval]	
E	0.099	0.062	1.60	0.110	-0.022	0.220
a	0.294	0.054	5.42	0.000	0.187	0.400
c	0.241	0.057	4.26	0.000	0.130	0.353
n	-0.016	0.060	-0.26	0.791	-0.133	0.102
o	0.118	0.058	3.22	0.001	0.073	0.303
_cons	0.697	0.338	2.06	0.039	0.034	1.361

Source: Researcher's Compilation, 2020

Discussion of Findings

This study examined the effect of personality traits (extraversion, conscientiousness, agreeableness, neuroticism, and openness) on entrepreneurial intention of undergraduates in Universities in Delta State, Nigeria. Results indicated that personality traits significantly predicted entrepreneurial intention among undergraduates in Universities in Delta State. This finding concurs with the results of previous studies (Ahmed *et al*, 2020; Sahin *et al*, 2019; Zhao *et al*, 2010). The association between conscientiousness and entrepreneurial intention was found to be positive and significant. This result is consistent with previous studies (Ahmed *et al*, 2020; Hu *et al*, 2017), but contrast the findings of Udayanganie *et al* (2019), who reported that conscientiousness has no positive and significant relation with entrepreneurial intention. This

suggests that students who score high in conscientiousness may have the tendency to want to start or have ownership of their own business venture.

Furthermore, openness was found to be significantly and positively related to entrepreneurial intention. This result supports the findings of Zhao *et al* (2010); Udayanganie *et al* (2019); and Butz *et al* (2019). This finding implies that students who possess high level of openness may be more entrepreneurial, in their career choice. A surprising result was that the relationship between agreeableness and entrepreneurial intention was positive and significant. This finding does not support previous studies (Ahmed *et al*, 2020; Butz *et al*, 2018; and Hu *et al*, 2017). The implication of this is that societal context may affect the relation between personality traits and entrepreneurial intention. Thus, students who are high in agreeableness may tend to have an entrepreneurial mind-set.

In addition, extraversion was found to be positively but insignificantly associated with entrepreneurial intention. This finding is consistent with Zhao *et al* (2010) and Purwana, Suhud and Wibowo (2018) studies, but inconsistent with the findings of Hu *et al* (2017) and Butz *et al*, (2018). Finally, neuroticism (reversed emotional stability) was found to be negatively, but insignificantly associated with entrepreneurial intention. This finding concurs with previous studies (Purwana *et al*, 2018; Zhao *et al*, 2010).

Conclusion

This study has examined the effect of personality traits on entrepreneurial intention. A questionnaire was used to collect survey data from 541 final year students drawn from six universities in Delta State, Nigeria. The findings suggest that personality traits such as conscientiousness, agreeableness, and openness have a significant positive influence on entrepreneurial intention of students, but extraversion and neuroticism have an insignificant influence on students' entrepreneurial intention. The study is prone to some limitations.

First, a convenience sample was used and this may affect the generalization of the findings. Secondly, since data for all the variables were collected from the same source and at the same time, common method bias may be a problem. Further, the study did not consider the influence of moderator/ or mediators such as gender, risk propensity, family background, and self- efficacy.

Recommendations

Based on the findings of the study, the following recommendations are made:

- i. The curriculum for entrepreneurial development programmes in Nigerian Universities should include personality development.
- ii. Psychologists should be involved in training the students to develop personality traits such as conscientiousness, agreeableness and openness.
- iii. Future research should consider the influence of moderator/ or mediators such as risk propensity, gender, family background, and self-efficacy.

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