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Mediating Effect of Collaboration on Dark Tetrad Personality Traits and Entrepreneurial Performance Nexus of Real Estate Agents in Abuja

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ABSTRACT: Personality traits are known to influence entrepreneurial performance. As such, entrepreneurship is often presented as a positive endeavour; neglecting the dark aspect and the collaborative efforts of entrepreneurs in industries such as the real estate. The dark entrepreneurial practices of real estate agents in Abuja have engendered unprecedented increase in rentage fees, scarcity of affordable houses for low- and middle- income earners, and polarisation of the city on the basis of highbrow and underdeveloped areas. This study therefore seeks to investigate the mediating effect of collaboration on dark tetrad personality traits and entrepreneurial performance nexus. The study adopts a cross-sectional survey design. The population of 233 real estate agents was obtained from the register of the Real Estate Developers Association of Nigeria (REDAN) in Abuja, while criterion sampling technique was employed to screen the population to 121 on the basis of predetermined criteria. Based on Baron and Kenny's (1986) four step approach for testing mediating variable, the generated data via questionnaire were subjected to linear and multiple regression methods. The result of the direct effect of dark tetrad personality traits on entrepreneurial performance is significant. Additionally, dark tetrad personality traits influence entrepreneurial performance indirectly through collaboration. Despite the unethical nature of these traits, the real estate agents still thrive in their businesses because of the corrupt and unstructured business environment in the city. Hence, a stiffer control of the activities of REDAN, and sensitization of existing and would-be real estate agents on the grave consequences of wholly possessing and exhibiting dark tetrad personality traits in the conduct of dark entrepreneurial activities are recommended.

KEYWORDS: Collaboration; Dark entrepreneurship; Dark tetrad personality traits; Entrepreneurial performance; Real estate agents

INTRODUCTION

Entrepreneurship is generally presented as a positive endeavour that enhances the development of individuals, families and nations (Adeyemo et al., 2023; Verduijn et al., 2014); neglecting the dark aspect which Schumpeter (1942) referred to as destructive entrepreneurship. Corroborating Schumpeter's view, Baumol (1990) averred that entrepreneurs can be productive or unproductive. Unproductive or destructive entrepreneurs include criminal gangs and entrepreneurs or firms that engage in rent-seeking, "sorting", lobbying, "kick back", hoarding, bribing, contract inflation, financial figures padding, cronyism, "markup" and/or artificial price inflation for the purpose of securing unearned "rents". Despite being considered unfavorable, abnormal and socially hurtful, dark tetrad personality traits (i.e., Machiavellianism, narcissism, psychopathy and sadism) are often associated with manipulative practices (Do & Dadvari, 2017; Jonason & Tost, 2010). Dark tetrad personality traits and entrepreneurial activities are increasingly displacing innovation and other productive activities (Cooke, 2020; Tepper & Hearn, 2018).

Dark tetrad personality traits are beneficial to dark entrepreneurs and entrepreneurships (Baumol, 1990; Cooke, 2020; Schumpeter, 1942). These traits form the behaviour of an individual and affect the results (such as performance) of what the person does (Klotz & Neubaum, 2016). Performance relates to skills, knowledge, effort and ability. As such, the perform levels of individuals can vary on the basis of their knowledge and personality traits (Yohannes, 2020). The theory of planned behaviour assumes that target behaviours like entrepreneurship and entrepreneurial performance can be influenced by skills and abilities (Awwad & Al-Aseer, 2021; Wu et al., 2019). Personality can indicate performance level and contribute to its variation among individuals. This is due to environmental and behavioural factor-related differences (Kwong & Cheung, 2003). An individual's success or performance as an entrepreneur can depend on his/her personality traits (Awwad & Al-Aseer, 2021; Hasso, 2013). Again, as noted by Fuller (2021) and Vasin (2020), cooperation or collaboration among individual members of a group can enhance the achievement of set goals and the performance of the group. Individuals with dark personality traits focus on meeting their immediate/environmental needs and short-term relationships through collaboration and by adopting a fast-life strategy. Based on the life history theory,

these individuals choose the fast-life strategy to maximise their tendency to survive (Carter et al., 2015; Mannino & Faraci, 2017). The choice of the fast-life style connotes taking risks to operate a business and to achieve improved performance (Jonason et al., 2010).

Previous researches have majorly focused on the big five personality traits (i.e., extraversion, agreeableness, neuroticism, conscientiousness and openness). Recent researches suggests that the big five cannot adequately assess the "darker" sides of an individual's personality. This is owing to the fact that the big five was theoretically derived. Thus, the emergence of the dark tetrad personality traits (Jonason & Middleton, 2015). Further, while most researches in Psychology of entrepreneurship have focused on the positive personality traits and entrepreneurial intentions, literature on the role of the dark personality traits in entrepreneurial performance are scant (Adeel et al., 2023; Mwatsika et al., 2018; Sahinidis et al., 2023). Studies on dark personality traits and corporate success or performance have only employed Machiavellianism, narcissism and psychopathy traits (Bongiovi, 2017; Cai et al., 2021). Dark personality traits are important part of service firms like real estate businesses (Chang et al., 2022). Real estate firms employ personality traits to enhance their performance and survival in their highly competitive business environment (Chang et al., 2022; Luecke & Katz, 2003). One of the highly competitive environments for real estate business is in Abuja.

As a growing capital city, Abuja is characterised by inadequate houses for both the rich and the poor. The city center is dotted with houses in the highbrow areas that can only be afforded by politicians and wealthy business owners. The Real Estate Developers Association of Nigeria (REDAN) in Abuja was established to provide houses that will accommodate the middle- and low-income earners through collaboration with relevant stakeholders in the real estate sector. More than three decades after, houses in the city are still beyond the reach of paid employees. Rather, houses are increasingly being provided for politicians, and business men and women. Consequently, the research question is whether the collaborative efforts of the real estate agents in Abuja who possess dark tetrad personality traits is associated with their entrepreneurial performance. This study is important as the effect of collaboration on the dark tetrad personality traits and entrepreneurial performance nexus can have theoretical and practical implications.

LITERATURE REVIEW

Theoretical Foundation

The theoretical foundation of this study is anchored on the Theory of Planned Behaviour (TPB) and Life-History Theory (LHT). The TPB which was theorised by Ajzen (1991) holds that the performance of a particular behaviour stems from an individual's intention to act accordingly (Ajzen, 2005). Since dark personality traits are integral parts of a person's bad behaviour, it follows that the bad personality traits of the individual can positively or negatively influence his/her performance in whatever endeavour. Based on Ajzen's (1991) determinants of entrepreneurial intentions, bad personality traits can be influenced by the individual's unfavourable evaluation of entrepreneurship, social pressure from important others (i.e., family, friends and other role models) and the perceived difficulty in ethically conducting a business. Further, the LHT as propounded by Philip S. Kavanagh and Bianca L. Kahi in 2016 suggest that an individual's selection of behavioural strategies is based on environmental needs. Individuals who possess dark tetrad personality traits as performance enhancing strategies adopt a fast-life strategy. Thus, highlighting the influence of the LHT on developing entrepreneurial performance among individuals (Cai et al., 2021; Wu et al., 2019).

Collaboration

Collaboration or cooperation is a process of interaction involving individuals who perceive the same problem differently but seek solution that is beyond their possibility by constructively exploring their differences (Jokanovic et al., 2020). Agbim et al. (2022) view collaboration as a process of shared experience, knowledge, skills, learning, creation and goals. Collaborative effort is better than the solo effort of the best individual (Demircioglu et al., 2021; Tan et al., 2021; Yang et al., 2022). As such, personality traits foster cooperation (Proto & Rustichini, 2014), while network cooperation or collaboration play an important role in firm performance (Mathrani & Edwards, 2020; Singh et al., 2022).

Dark Tetrad Personality Traits

Personality traits can be positive (bright or light) or negative (dark). Either of the categorisation form the behaviour of an individual (Klotz & Neubaum, 2016). Specifically, dark or negative personality traits are viewed as sources of dysfunctional behaviour (Sahinidis et al., 2023). Dark personality traits refer to a set of non-clinical,

but socially unpleasant traits that are related to each other (Jonason & Webster, 2010). However, dark tetrad personality traits (i.e., Machiavellianism, narcissism, psychopathy and sadism) are distinguishable, moderately relevant and mutually influential (Wu et al., 2019; Zettler & Solga, 2013).

Entrepreneurial Performance

Entrepreneurial performance is the ability to achieve financial and non-financial goals (Agbim, 2019; Meunier et al., 2017). The use of a combination of the two indicators is preferred to the employment of financial indicators only (Agbim, 2019). This is because the two indicators complement each other (Agbim, 2019; Agbim et al., 2022).

Hypothesis Development

Bright personality traits such as agreeableness significantly predict cooperation preferences (Volk et al., 2011). Cooperative behaviour can be predicted by openness (Al-Ubaydli et al., 2014). Conversely, Bhattacharjee et al. (2023) empirically affirmed that anti-social personality traits can predict the formation of cooperative dyad. The success of such cooperation is associated with friendship and dissimilarity involving individuals who possess similar non-social personality traits. Akmal (2015) notes that the setting and success of the team which is made up of such individuals can be predicted by their personality traits. Tian et al. (2022) concludes that entrepreneurial traits can significantly and positively influence economic and social performance. Chang et al. (2022) suggests based on their study that the personality traits of real estate brokers can positively and significantly exert influence on innovation performance. Pattanayak and Kakati (2023) found that a strong positive relationship exists between entrepreneurial traits and enterprise success. However, there are differences between the personality traits of successful and unsuccessful enterprises. More specifically, Kiziloglu et al. (2021) established that the direct and indirect effects of neuroticism on job performance is negative, while the direct effects of Machiavellianism and spitefulness on job performance were positive. However, Kiziloglu et al. concludes that anti-social personality traits may promote higher job performance. Corroborating the foregoing, Areal (2021) asserts that outcomes of activities can be influenced by personality traits and willingness to cooperate with others. Consequently, with a special focus on real estate agents in Abuja, we propose that:

H_0: Collaboration does not mediate the dark tetrad personality traits and entrepreneurial

performance nexus

METHODOLOGY

Research Design and Sampling Technique

This study adopts a cross-sectional survey design to facilitate the gathering of adequate data from a representative of the study population. The population of the study is 233. It is made up of all the real estate agents who are registered with the Real Estate Developers Association of Nigeria (REDAN) in Abuja. Abuja was chosen because of: the dark entrepreneurial practices of real estate agents in the city; the unprecedented increase in the rentage fees for houses, shops, offices and spaces; scarcity of affordable houses for low- and middle- income earners; and the polarisation of the city on the bases of highbrow and underdeveloped areas. The highbrow areas are majorly inhabited by politicians and wealthy business men/women, while the underdeveloped areas which are characterised by lack of basic social amenities and incessant demolition are occupied by the low- and middle- income earners.

The study adopts criterion sampling technique to screen all the elements that make up the population. The screening was based on the following predetermined criteria: (i) the agent has been a member of the Real Estate Developers Association of Nigeria (REDAN) in Abuja for not less than 25 years. This is to ensure that the agent started practicing from the military regime (marked by the creation of Abuja as the capital of Nigeria and dark entrepreneurial practices in the real estate sector) to the democratic dispensation (characterised by polarisation of the city on the bases of rentage fees and social amenities); (ii) the agent has been actively involved in the sale and letting of houses, shops and/or spaces; (iii) the agent engages in anti-social activities in real estate transactions; and (iv) the agent collaborates with other agents in the buying, selling and/or letting of houses, shops and/or spaces. Based on the aforementioned criteria, the target population of the study is 121. Owing to the small target population, the study adopts census method, while the real estate agent is the unit of analysis.

Measures

The variables in the questionnaire were measured based on gleanings from previous studies. The measures of dark tetrad personality traits which were adapted from Cai et al. (2021) and Sahinidis et al. (2023) are: “I manipulate others to do what I want”; “I cheat and/or lie to achieve my purpose”; “I take advantage of others for my own benefit”; “I am unethical in my actions”; “I am cruel or

indifferent to others"; "I am cynical"; "I want others to admire me"; "I expect special treatment and favours from others"; "I enjoy hurting or humiliating others"; "I have no fear for others"; and "I like engaging in harmful actions". The measures of collaboration which were adapted from Krawczyk-Bryłka et al. (2020) are: "We share important skills and knowledge among ourselves"; "Leadership roles are divided among members"; "All agents who are members of the real estate agents' association are involved in running the association"; "All members support each other in achieving their firm's goals"; and "We are committed to using our unique competencies to achieve the objectives of the association".

The measures of entrepreneurial performance which were adapted from Al-dalahmeh et al. (2018), Hernaus et al. (2012) and Shahin et al. (2014) are: "The firm's profit is steadily improving"; "The firm's profit is higher than the industry average"; "The value added by the firm is improving"; "The firm's return on assets is steadily improving"; "The firm's return on assets is higher than the industry average"; "The firm satisfactorily attends to existing customers"; "The firm's employees attract potential customers to the business"; "The firm's employees attend to customers' complaints conclusively"; "The firm's employees maintain a high level of commitment when serving clients"; and "The firm's employees are determined to enhance the reputation of the firm". The variables in the questionnaire were measured on a 5-point Likert scale that ranged from strongly agree (5) to strongly disagree (1). The resultant overall Cronbach's alpha coefficient of the measures is 0.83.

Model Specification

Based on Baron and Kenny's (1986) four step approach for testing mediating variable, the models for hypotheses one to four are shown in equations (i) to (iv). The four steps in Baron and Kenny's approach are: (i) the independent variable must have an effect on the dependent variable; (ii) the independent variable must have an effect on the mediating variable; (iii) the mediating variable must significantly influence the dependent variable; and (iv) the regression coefficient on the dependent variable (unstandardised beta value) will decrease in relation to the beta value in step one. Linear regression was used in the first three steps, while multiple regression was applied in the fourth step with the aid of SPSS (Version 25.0 for Windows).

Step 1: $EPE = \beta_0 + \beta_1 DPT + e$ ---------- (i)

Apriori expectation: DPT will have a positive effect on EPE, while absence of DPT will mean negative affect on EPE.

Step 2: CBN = $\beta_0 + \beta_1 DPT + e$ ---------- (ii)

Apriori expectation: DPT will have positive effect CBN, while absence of DPT suggests negative affect on CBN.

Step 3: EPE = $\beta_0 + \beta_1 CBN + e$ ---------- (iii)

Apriori expectation: CBN will have positive effect EPE, while absence CBN will result to negative affect on EPE.

Step 4: EPE = $\beta_0 + \beta_1 DPT + \beta_2 CBN + e$ ---------- (iv)

Apriori expectation: CBN is will mediate the relationship between DPT and EPE, while absence CBN will imply alteration of the relationship in equation (iv).

Where
DPT = dark tetrad personality traits
CBN = collaboration
EPE = entrepreneurial performance
β_0 = the intercept of the line with Y - axis
β_1 = the slope. It estimates the rate of change in the dependent variable for a unit change
in the independent variable
e = random error

RESULTS AND DISCUSSION

The distribution of the respondents by gender shows that 84.3% are male, while 15.7 are female. This implies that most of the respondents are males. Further, the distribution of the respondents by age reveals that 80.1% of the respondents are aged 50-59 years old. This suggests that majority of the respondents are older than or equal to 50 years old but less than 60 years old.

Table 1: Goodness-of-fit of the Regression of DPT on EPE

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1EPE	.850[a]	.723	.723	.76806	.865	2077.303	1	326	.000

a. Predictors: (Constant), DPT

Note: DPT = Dark Tetrad Personality Traits, EPE = Entrepreneurial Performance
Source: Field Work, 2024

As shown in Table 1, the relationship between dark tetrad personality traits and entrepreneurial performance is strong. That is, dark tetrad personality traits can influence entrepreneurial performance (R = .850). Also, the coefficient of determination (R^2 = .723) reveals that dark tetrad personality traits significantly contributes to entrepreneurial performance. Further, dark tetrad personality traits explain 72.3% of the total variance in entrepreneurial performance. This is as shown by the adjusted R^2, while the standard error of .76806 reveal that dark tetrad personality traits is significant in explaining the variation in entrepreneurial performance. The F change of 2077.303 and p-value of 0.000 depicts that an F change of this value cannot occur solely by chance.

Table 2: Coefficients of the Regression of EPE on DPT

Model		Unstandardised Coefficients		Standardised Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.125	.462		.313	.721
	DPT	.808	.022	.800	36.532	.000

a. Dependent Variable: EPE
Note: DPT = Dark Tetrad Personality Traits, EPE = Entrepreneurial Performance
Source: Field Work, 2024

It is evident in Table 2 that Baron and Kenny's (1986) first condition for the determination of a mediating variable is satisfied. That is, the effect of dark tetrad personality traits on entrepreneurial performance is significant (β = .800, t =36.532, P = .000).

Table 3: Coefficients of the Regression of CBN on DPT

Model		Unstandardised Coefficients		Standardised Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.570	.381		6.410	.000
	DPT	.780	.018	.779	30.253	.000

a. Dependent Variable: CBN
Note: DPT = Dark Tetrad Personality Traits, CBN = Collaboration
Source: Field Work, 2024

Table 3 reveals that the effect of dark tetrad personality traits on collaboration is significant (β = .779, t =30.253, P = .000). Thus, the second condition of Baron and Kenny's (1986) has been met.

Table 4: Coefficients of the Regression of CBN on EPE

		Unstandardised Coefficients		Standardised Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-3.274	.482		-5.350	.000
	CBN	1.361	.036	.795	38.325	.000

a. Dependent Variable: EPE
Note: CBN = Collaboration, EPE = Entrepreneurial Performance
Source: Field Work, 2024

Table 4 shows that the effect of collaboration on employee performance is significant (β = .795, t =38.325, P = .000). Thus, based on Baron and Kenny's (1986) approach, the third condition for determining a mediating variable is satisfied.

Table 5: Coefficients of the Regression of EPE on DPT and CBN

Model		Unstandardised Coefficients		Standardised Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.137	.392		.421	.605
	DPT	.747	.034	.841	36.501	.000
2	(Constant)	-1.740	.511		-5.504	.000
	DPT	.472	.062	.663	12.711	.000
	CBN	.481	.074	.507	8.078	.000

a. Dependent Variable: EPE
Note: DPT = Dark Tetrad Personality Traits, CBN = Collaboration, EPE = Entrepreneurial Performance
Source: Field Work, 2024

It can be deduced from Table 5 that when the variable, collaboration was added to the dark tetrad personality traits and entrepreneurial performance model, the unstandardised beta value of dark tetrad personality traits decreased from (β = .747, t = 36.501, P = .000) to (β = .472, t =12.711, P = .000). Thus, based on Baron and Kenny's (1986) conditions for determining a mediating variable, H_0 is rejected. We then conclude that collaboration significantly mediates the relationship between dark tetrad personality traits and entrepreneurial performance of real estate agents in Abuja. That is, the effect of dark tetrad personality traits on entrepreneurial performance is indirect; dark tetrad personality traits influence entrepreneurial performance through collaboration.

DISCUSSION OF RESULTS

The results of the study show that dark tetrad personality traits made significant effect on

entrepreneurial performance. This direct effect implies that individuals who possess dark tetrad personality traits, and who create and operate dark entrepreneurship will definitely be concerned about achieving improved entrepreneurial performance. This could also mean that the competencies of dark entrepreneurs and the resources they garner by leveraging their dark personality traits enhances their entrepreneurial self-efficacy in gaining improved entrepreneurial performance. As previously established in extant literature, anti-social personality traits promote entrepreneurial success, innovation performance and higher job performance (e.g., Bhattacharjee et al., 2023; Chang et al., 2022; Kiziloglu et al., 2021).

The result of the indirect effect reveals that collaboration mediates the relationship between dark tetrad personality traits and entrepreneurial performance. That is, dark tetrad personality traits influence entrepreneurial performance of real estate agents in Abuja through their collaborative efforts as Real Estate Developers Association of Nigeria (REDAN). Notwithstanding the rarity of literature in this area of research, the current result is somewhat related to the findings of Kiziloglu et al. (2021) and Bhattacharjee et al. (2023). Kiziloglu et al. established that anti-social personality traits are associated with improved job performance, while Bhattacharjee et al. concludes that anti-social personality traits can foster successful cooperation. As noted by Kerr et al. (2018), despite the commencement of research on personality traits and entrepreneurship in the twentieth century, literature in this area of study is seemingly nonexistent.

The scant literature on dark tetrad personality traits can be attributed to researchers' perception of the concept as anti-social. Hence, has no positive practical contribution to entrepreneurship development (Denisi, 2015; Wu et al., 2019). Ant-social behaviours and personality disorders like dark tetrad personality traits (i.e., Machiavellianism, narcissism, psychopathy and sadism) still collectively contribute to higher-level theoretical predictions of outcomes (Cooke, 2020; Furnham et al., 2013; Paulhus, 2014; Wertag, 2022) such as entrepreneurial performance. As such, individuals with a high level of dark personality traits are more attracted to entrepreneurship (Kramer et al., 2011). Additionally, these individuals that possess dark tetrad personality traits may be seen as terrible and irregular, they however can facilitate successful management and performance of businesses (Do & Dadvari,

2017; Hmieleski & Lerner, 2016) through collaboration with others in the real estate industry. This is the contribution of the study to the dark tetrad personality traits and entrepreneurial performance literature.

The degree of independence between the light and dark personality traits suggests that the absence of light, does not necessarily imply the presence of darkness. Hence, there is a mixture of light and dark personality traits in every individual; although at varying degrees (Cooke, 2020; Kaufman et al., 2020). Moreover, personality traits are important in entrepreneurship (Ajzen, 1991; Farrukh et al., 2018) because some entrepreneurial skills are embedded in the personality traits of entrepreneurs. Thus, both the bright and dark personality traits are required in varying degrees to influence various aspects of entrepreneurial activities and the entrepreneurial process. The dark or anti-social disposition of an individual can stem from his/her perception of the environment, life challenges and/or social pressures from family and friends. This assertion is supported by the Life History Theory's (LHT) tenet that the behaviour of humans is influenced by their environment. Also, based on the Theory of Planned Behaviour (TPB), an individual's unfavourable evaluation his/her environment, lack of support from significant others and inability to control his/her behaviour can trigger dark tetrad personality traits. However, the environmental needs of the individual can in the long run direct or redirect the individual's efforts towards positive ends like entrepreneurial performance.

The theoretical implication of the study based on the Life History Theory (LHT) is that an individual's environment can positively influences the outcome of whatever he/she does through the group/association the individual belongs to in the environment. Otherwise, the individual when working alone may not be able to achieve outcomes like improved entrepreneurial performance. Again, based on the Theory of Planned Behaviour (TPB), the environmental needs of a dark entrepreneur are the drivers that facilitate the achievement of such needs. The drivers help the dark entrepreneur to overcome the challenges associated with the unfavourable evaluation of the environment, lack of support from family and friends and inability to control his/her behaviour. It can thus be deduced that the current study is complementary to previous researches. For instance, this study complements and extends the studies by Volk et al. (2011) and Al-Ubaydli et al. (2014) which focused on the

bright personality traits and cooperative behaviour by introducing the dark tetrad personality traits and collaboration as a mediating variable. The current study also complements and extends researches by Bongiovi (2017) and Cai et al. (2021), which applied the triad dimensions of dark personality traits (i.e., Machiavellianism, narcissism and psychopathy traits) by introducing the tetrad dimensions (i.e., Machiavellianism, narcissism, psychopathy and sadism traits). Therefore, the practical implication of the current study is that any real estate agent who possesses dark tetrad personality traits and operates a thriving firm, also possesses some degree of the bright personality traits.

However, this study is not without limitations. The first limitation concerns the study population. Only real estate agents in Abuja were surveyed. Therefore, to enhance the generalisability of the results, the geographical scope of further studies can be broadened by collecting data from the six geopolitical zones of Nigeria. The second limitation is the scant literature. The dearth of studies on collaboration, dark tetrad personality traits and entrepreneurial performance in the Nigerian context made literature review of related researches somewhat challenging. This challenge can be overcome when more related researches are conducted in the Nigerian context. The third limitation is the methodological bias that is associated with the withdrawn information in questionnaire surveys. This limitation can be taken care of in further studies by conducting a mixed method research; involving the use of quantitative and qualitative research methods.

The fourth limitation is associated with the narrow sample size. That is, the study was limited to only registered real estate agents in Abuja. The broadening of the geographical scope can be employed to overcome this limitation. The fifth limitation is the consideration of collaboration and dark tetrad personality traits as the predictors of entrepreneurial performance. Future researchers can overcome this limitation by using or introducing other mediators or moderators like commitment and entrepreneurial education.

CONCLUSION AND RECOMMENDATION

This study investigates the contribution of personality traits to entrepreneurial performance using a somewhat different concept; the dark tetrad personality traits. The introduction of collaboration as a mediating variable can help us understand better why real estate agents who possess dark tetrad

personality traits and who are working together as an association achieve improved entrepreneurial performance. This result reveals that dark tetrad personality traits influence entrepreneurial performance indirectly, that is through collaboration. Despite the unethical nature of these traits, the real estate agents still thrive in their businesses because of the corrupt and unstructured business environment in the city. Hence, the study recommends a stiffer control of the activities of REDAN, a more concerted and transparent fight against corruption and sensitisation of existing and would-be real estate agents on the grave consequences of wholly possessing and exhibiting dark tetrad personality traits in the conduct of dark entrepreneurial activities.

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