Personality Traits as Correlates of Adult Learners' Academic Performance in Literacy Education Centres in Ilorin, Kwara State in Nigeria

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Abstract

The purpose of this study was to find out the relationship between the five personality traits and adult learners' academic performance in literacy education centres. The research employed correlation research design. In this study, 74 adult learners were sampled using simple random sampling technique. The researcher designed a personality traits questionnaire (with reliability index of 0.83 which was used for data collection. Data analysis was through descriptive statistics of mean to answer the research question and a linear multiple regression to test the hypothesis at 0.05 level of significance. Findings from the study revealed that majority of the adult learners were of moderate level in academic performance in Ilorin Metropolis. The combination of the independent variables significantly predicted the dependent variable ($F_{(4, 69)}$ = 7.273, $p<0.05$). Thus, it was recommended that, adult learners should always dispense good personality to their studies and approach their learning duties with zeal and enthusiasm.
Keywords: *adult learning, agreeableness, conscientiousness, extraversion, neuroticism*

Introduction

Academic achievement is a major issue among students, teachers, parents, school administrators and the community at large. Attempts have been made by researchers to unravel the complexities surrounding academic achievement. Many psychologists such as Blickle (2004), Buadi (2000), Buchanan (2001) and Paunonen (1998) have consistently attempted to identify the major predictors of individual academic achievement. They have identified factors such as intelligence, cognitive ability, personality, motivation and others. Blickle (2004) asserted that personality traits

explain the differences in individuals' academic performance and these differences are appropriate to use when exploring the individual performance in different areas. The most popular and empirically solid model within personality research, the Five-Factor Model, focuses on five categories or so-called personality traits. These traits are easily distinguishable from each other and are stable over long period of time. The personality traits developed by Costa and McCrae (1992) often called the big five are: Openness to experience (O), Extraversion (E), Conscientiousness (C), Agreeableness (A) and Neuroticism (N). The research by Costa and McCrae has paved way for the five-factor model.

Agreeableness simply means communal orientation towards others and people with this type of personality have traits such as altruism, tender-mindedness, soft-heartedness, helpfulness, trust and modesty (Saxena & Mishra, 2015). Costa and McCrae (1992) further pointed out that conscientiousness describes socially prescribed impulse control that facilitates task- and goal-directed behaviour such as thinking before acting, delaying gratification, self-discipline, being careful, following norms and rules, planning, organizing and prioritizing tasks (Saxena & Mishra, 2015). Daminabo (2008) illustrated that neuroticism contrasts emotional stability and even temperedness with negative emotionality such as feeling anxious, nervous, insecure, sad, and tense. Finally, openness that describes the breadth, depth, originality and complexity of an individual's mental and experiential life. People with such traits are independent, imaginative and prefer variety (Samaneh, 2012). Agreeableness will influence academic performance of adult learners in literacy education centres because adults with such personality traits will relate well with other students and they will be able to study and exchange academic ideas through group discussion from each other.

Adult education is often referred to as a transmission process of general, technical or vocational knowledge, as well as skills, values and attitudes which takes place out of the formal education system with a view to correct early inadequacies in the academics of these adult learners (Oduaran, 2000). The adult learners who have an extraversion trait will be more energetic and also work as a team with other colleagues in the class. Seya (2005) pointed out that the implications of extraversion trait on the adult learners is that they will be eager to learn through group discussion with other colleagues and also what their facilitators teach them in the class. The impact of this on the adult learners is that it will have positive impact on their academics as well as other aspects. Agreeableness is an attitude of the adult learners to interact with others. Individuals who are high on this dimension are considered friendly, trustworthy and co-operative. The conscientiousness dimension is associated with adult learners who are organized, persistent and focused

towards their goals. Neuroticism is another personality trait that exhibit in the adult learners who are not emotionally stable because such individuals will always be nervous, anxious, insecure, sad and tense. Openness describes the breadth, depth, originality and complexity of an individual mental and experiential life, and adult learners with such traits will be independent and imaginative (Samaneh, 2012).

Personality refers to the patterns of thoughts, feelings, social adjustments and behaviours consistently exhibited overtime that strongly influence one's expectations, student perception, values and attitudes (Ezike, 2017). The quest to know the personality traits that affect the academic performance of adults has attracted so many researches such as O'Connor and Paunonen (2007), Noftle and Robins (2007) and Paunonen (1998). In order to answer some of the personality trait questions, personality psychologists have developed a sophisticated model of personality known as trait theory. Daminabo (2008) defined trait as a continuous dimension on which individual differences may be arranged quantitatively in terms of the amount of the characteristics the individual has. Chowdhnry (2006) defined trait as a property within the individual that accounts for his unique but relatively stable reactions to the environment. Personality refers to the relatively consistent and enduring patterns of emotions, cognition and behaviours that make individuals similar to or different from others (Wagerman & Funder, 2007). Therefore, personality traits may be considered accountable for the differences in students' enduring emotional, cognitive, attitudinal and behavioural patterns with the resultant effect on their academic performances (Olowookere, Alao, Adekeye & Ayorinde, 2017). There is adequate literature on personality but the tradition that has gained a lot of attention over the last few decades is the one focusing on the five-factor model (Matthews, Deary & Whiteman, 2013). This model is based on five distinguishable personality traits.

Adult education as a field of study is indispensable in national development as its relevance cuts across all sectors. Oduaran (2000) asserted that adult education having suffered much neglect and accorded low priority by governments in the pre - and post-independence era in Nigeria, the developmental potentials of the discipline was unexplored and it remained marginalized in the curricula of most tertiary institutions in the country. The functional nature of African traditional system of education which has inbuilt adult education learning strategies equipped people with knowledge and skills that enabled them live and cope with challenges within their environment. As society became more complex with its increasing socio-economic problems that are currently ravaging most developing nations, more emphasis is still placed on formal system of education with little attention on non-formal education and particularly adult education as a discipline in Nigeria.

A number of studies have been conducted on personality traits and academic performance. For instance, Mera (2004) conducted a research on the relationship between personality traits, learning styles and academic performance of electonic-learners. The results showed that extraversion was positively related to all four learning styles while neuroticism was negatively related to all four learning styles. Samaneh (2012) conducted an empirical study on the role of personality traits in information technology adoption. The study used the Five - Factor Model (FFM) to assess the personality of individual users who adopted social networking technologies using their mobile devices. The study found that extraversion and agreeableness positively and significantly influenced social networking behaviour among others. Preckel, Holling & Vock (2006) carried out a research on the impact of personality traits on the academic success of university undergraduates at the University of Jaffna using big five personality traits theory. The results revealed that extrovertedness, conscientiousness and openness were positively associated with adult learners' academic performance while neuroticism and agreeableness were negatively associated with academic performance.

There are several barriers that hinder the academic performance of adult learners in literacy education centres. Situational barriers include multiple responsibilities at home, family, children and lack of support from spouses. Institutional barriers consist of limitations regarding methods institutions use to design, deliver and administer learning activities. The types of institutional barriers that are related to this includes the issues of providing financial support to adult learners in order to pay for tuition fees in literacy education centres, resources needed for learning activities, a general lack of support services at times and places suitable to adult learners. Considering a number of studies on personality traits and academic performance of adults, there is dearth of studies of such traits on the academic performance of adults in literacy education centres. Thus, this study focused on five personality traits as correlate of adult learners' academic performance in literacy education centres in Ilorin Metropolis in Nigeria.

Purpose of the study
This study examined the correlation between adult learners' personality traits and academic performance in Ilorin Metropolis in Kwara State, Nigeria.

Specific research objectives
Specifically, the study objectives focused on finding out the relationship between the five personality traits developed by Paul Costa and Robert McCrae and adult learners' academic performance in literacy education centres in Ilorin Metropolis.

Research hypothesis

The following hypothesis was postulated for this study and tested at 0.05 level of significance.

HO$_1$: there is no significant correlation between adult learners' personality traits and their academic performance in Ilorin Metropolis.

Methodology
Area of study

This study focused on the personality traits as correlates of adult learners' academic performance in Ilorin Metropolis in Nigeria. More specifically, the study was conducted in Ipata, Odoota and Adeta communities.

Research design

The research design adopted for this study was a correlation research design. This design was adopted in this study because it helped to compare the level of one variable with others to see if a relationship existed between the two.

Population and sampling techniques

 The population of adult learners in various adult literacy education centres in Ilorin metropolis were 150 adult learners, the age range of these participants ranged between 45 to 60 years and these adult learners were unable to attend formal education. The adult learners who participated in this study were 74 students who were selected for the study through simple random sampling technique. Ilorin was selected because it is the state capital of Kwara state and literacy education centres are found mainly in Ilorin.

Research instruments

Research designed questionnaires which were used for data collection. This instrument consisted of two sections A and B. Section A was structured in a four- point Likert scale that was used to gather information on the profile of the personality traits (agreeableness, conscientiousness, neuroticism, openness to experience and extraversion) of the adult learners while section B comprised assessment test to elicit the performance of the adult learners. To ensure the validity of the Personality Traits Questionnaire (PTQ), it was given to the experts in the Department of Counsellor Education, University of Ilorin. Based on their submissions and corrections, a modified final copy of the instrument was then produced. Subsequently, to determine the reliability of the instrument, the pilot study of a three-week interval was conducted for 10 adult learners who were

selected in literacy education centre in Ojomu community situated in Offa local government of Kwara state. The Pearson Product Moment Correlation was used to analyze the data collected through the questionnaire. The reliability index of 0.83 was obtained. The data obtained were analyzed using linear multiple regression.

Data analysis

Table 1 shows the regression analysis of adult learners' personality traits and their academic performance

HO_1: There is no significant correlation between adult learners' personality traits and their academic performance in Ilorin Metropolis.

Table 1: *Regression Analysis of Adult Learners' Personality Traits and their Academic Performance in Ilorin Metropolis*

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	993.688	4	248.422	7.273	.000[b]
Residual	2357.192	69	34.159		
Total	17350.870	73			

    a. Dependent Variable: academic performance
    b. Predictors: (Constant), personality traits (i.e. agreeableness conscientiousness, neuroticism, openness to experience, and extraversion)

The model in Table 1 indicates the linear combination of predictor variables, that is personality traits (agreeableness conscientiousness, neuroticism, openness to experience and extraversion). The F-value is 7.273 with 4 and 69 degree of freedom at 0.05 critical level of significance. Since the p-value of 0.00 is less than 0.05 level of significance, the null hypothesis was rejected. Therefore, the combination of the independent variables significantly predicted the dependent variable ($F_{(4, 69)}$ = 7.273, p<0.05). Thus, there was significant correlation between personality traits and academic performance of adult learners in the study area. In order to ascertain the contribution of the independent variables together, r-square was computed and the outputs were shown in Table 2.
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Table 2: *Regression Model Summary of Agreeableness, Conscientiousness, Neuroticism, Openness to Experience and Extraversion*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.202ᵃ	.441	.021	9.15877

a. Predictors: (Constant), personality traits (agreeableness conscientiousness, neuroticism, openness to experience, and extraversion)

As shown in Table 2, all independent variables (agreeableness conscientiousness, neuroticism, openness to experience and extraversion) jointly contributed to R-Square of 0.441, representing 44.1% to the dependent variable (academic performance). To determine the contribution of each of the independent variable, Beta Weight was calculated and the outputs were shown in Table 3.

Table 3: *Relative Contributions of Independent Variables to Adult Learners' Academic Performance*

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig
(Constant)	46.20	3.26		19.41	0.00
Neuroticism	0.76	1.36	0.11	1.29	0.19
Openness	1.49	1.06	0.10	2.34	0.04
Agreeableness	1.64	1.28	0.13	2.58	0.02
Extroversion	2.15	1.37	0.17	2.66	0.01
Conscientiousness	2.92	1.21	0.12	2.81	0.00

a. Dependent Variable: Academic Performance
a. Predictors: (constant), personality traits (agreeableness conscientiousness, neuroticism, openness to experience, and extraversion)

Table 3 shows the relative contribution of each of the independent variables. The table reveals that conscientiousness has the highest contribution of Beta weight of 2.92 with t-value 2.81 followed by extroversion which has the Beta weight 2.15 with t-value 2.66; then agreeableness having the beta weights 1.64 while

openness has the contribution of 1.49 and neuroticism has 0.76. This implies that adult learners' conscientiousness, extroversion, agreeableness and openness to experience significantly predicted their academic performance in in the study area while neuroticism was insignificant.

The contributions were presented in the equation below:

$$Y = a + biX_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_nX_n$$

Thus, the weight of each independent variable in this study can therefore be substituted in the equation as:

$$Y = 46.20 + 1.64X_1 + 2.92X_2 + 0.76X_3 + 1.49X_4 + 2.15X_5$$

Where:

Y = Adult Learners' Academic Performance

a = Constant (other factors that are related to adult learners' but not considered in this study) = 46.20

b_1 = Agreeableness = 1.64

b_2 = Conscientiousness = 2.92

b_3 = Neuroticism = 0.76

b_4 = Openness = 1.49

b_5 = Extraversion = 2.15

Discussion of Findings

The findings revealed that there was a significant relationship between adult learners' agreeableness and their academic performance in Ilorin Metropolis. This shows that adult learners' agreeableness and their academic performance were positively and relatively highly related. Agreeableness is the tendency to be pleasant, compassionate, cooperative and accommodating in social situations rather than being antagonistic and suspicious of others. An agreeable person is good, natured, cooperative and functioning. Agreeableness has been found to be positively related to academic performance in some studies (Conard, 2006; Okech, 2006). Thus, this concurs with the findings of the study. The implications of this finding are that adult learners who are pleasant, compassionate and cooperative will be more dedicated to their studies. The facilitators can also build on these traits to achieve success in the academic achievement of these adult learners.

In addition, the result of this study indicated that there was a significant relationship between adult learners' conscientiousness and their academic performance in Ilorin Metropolis. This shows that adult learners' conscientiousness and their academic performance were positively and highly related. Conscientiousness is a tendency to show self-discipline, act dutifully and aim for achievement amidst various challenges. It has been one of the big five factors most consistently linked

to academic performance. Many studies have found a positive association between conscientiousness and academic performance (Buandi, 2000; Cornrad & Patry, 2012). O'Connor and Paunonen (2007) and Noftle and Robins (2007) reported that consciousness was the strongest predictor of academic performance. Indeed, quite a number of researches demonstrate that conscientious students achieve higher levels of academic success schools (Preckel, Holling & Vock, 2006; Trautwein, Ludtke, Roberts, Schnyder & Niggli, 2009). The implication of this trait on adult learners is that they will be more dedicated to their studies and the facilitators will be encouraged to teach adult learners with such trait.

Furthermore, this study showed that there was no significant relationship between adult learners' neuroticism and their academic performance in the study area. This finding is in harmony with the views of (De Fruyt & Mervielde, 1996; Fasokun, 2000) who asserted that there was no significant relationship between adult learners' academic performance and neuroticism. People with neuroticism tend to have more depressed moods, anxious, angry and vulnerable. On the other hand, the research carried out by De Raad & Shouwenburg (2006) showed that neuroticism was found in some studies to be positively related to academic performance. The implications of this result are that the facilitators in this literacy education should motivate learners, avoid provoking them and they should work on their emotions. In turn, this will help them to be emotionally stable and dedicated to their studies.

Moreover, findings of this study revealed a significant relationship between adult learners' openness to experience and their academic performance. This shows that adult learners' openness to experience and their academic performance were positively related. Openness reflects the degree of intellectual curiosity, creativity and a reference for novelty and variety. Investigation of openness as a predictor of academic performance has also produced mixed results. The result of the study concurs with Phillips, Abraham and Bond (2003) who identified in their study that there was positive association between openness and academic performance. On the contrary, Noftle and Robbins (2007) did not find a significant relationship between openness and academic performance. Many other studies did not find association between openness and academic performance (Conard, 2006; Hair & Hampson, 2006). The implication of this finding is that the adult learners with this trait will be curious to learn and they will be anxious to ask questions in the class. Thus, facilitators should always answer their questions and encourage them to be more committed to their studies.

In the same vein, it was found that there was a significant relationship between adult learners' extraversion and their academic performance and this is contrary

to the research findings of Furnham and Chamorro-Premuzic(2004) and Hair and Hampson (2006) who revealed that extraversion negatively correlated with academic performance. Extraversion is characterized by sociability, assertiveness, emotional expressions and excitability. Adults with high rate of this trait are often described as being out-going and talkative while those who are low in this trait are described as quiet and reserved. Research examining extraversion as a predictor of academic performance has produced mixed results.

Lastly, findings from this study revealed that there was significant correlation between personality traits (agreeableness, conscientiousness, neuroticism, openness to experience and extraversion) and academic performance of adult learners. However, adult learners' conscientiousness, extroversion, agreeableness and openness to experience significantly predicted their academic performance while neuroticism was insignificant. However, this finding negates the study by Kling (2001) which found that personality traits and learning have a weak relation. Only the personality trait conscientiousness has an impact on learning in school while Samaneh (2012) revealed that extroversion, conscientiousness and openness were positively associated with adult learners' academic performance but neuroticism and agreeableness were negatively associated with academic performance.

Conclusions

The outcome of this study provided empirical evidence to show that adult learners' agreeableness and their academic performance were positively related. Adult learners with such personality trait have the tendency to be compassionate and pleasant and this will have positive impact in their academic performance. On the other hand, it has been indicated that there is significant relationship between adult learners' conscientiousness and their academic performance, and adult learners with such traits tend to be self-disciplined, industrious and aim for achievement amidst various challenges. Furthermore, this study showed that there was no significant relationship between adult learners' neuroticism and their academic performance. Those with such traits tend to be anxious, angry and emotionally unstable. Such traits usually have negative effects on adult learners' academic performance. Thus, it can be concluded that the agreeableness, conscientiousness, extroversion and openness to experience of adult learners were high while their neuroticism was low.

Recommendations

Based on the findings and conclusions of this study, the following recommendations are worth considering:

1) Adult learners with agreeableness personality trait have the tendency to be compassionate, pleasant and cooperative. Thus, the facilitators in these literacy centres should encourage those with such traits to endeavour to work towards excellent results in their academics since such adults are always attentive in class and eager to learn.

2) Adult learners who have conscientiousness trait are always determined to do well in class and they usually obey the rules and regulations in the school. It is recommended that the facilitators should give them more tasks and assignments since they are industrious and eager to do well in any assignment given to them. This will help such adults to perform better in their studies

3) It is recommended that facilitators in literacy education centres should try to encourage adult learners who have conscientiousness traits. They should always make them happy through various motivational principles; they should counsel and build confidence in such adult.

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